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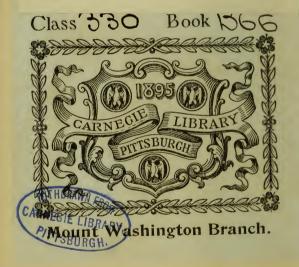
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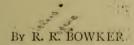






ECONOMICS FOR THE PEOPLE

BEING PLAIN TALKS ON ECONOMICS
ESPECIALLY FOR USE IN BUSINESS, IN SCHOOLS
AND IN WOMEN'S READING CLASSES



FIFTH EDITION, REVISED

NEW YORK

HARPER & BROTHERS, FRANKLIN SQUARE

1896

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PREFATORY NOTE.

J. B. H . app

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In the dupon

This little book was written because there seemed to be need of it and I could get no one else to undertake it. It grew out of my summary of Economics, "Of Work and Wealth," which had developed from a chapter in a book yet uncompleted, on "The Arts of Life." It is an endeavor to set forth the principles of Economics so as to make them plain and interesting to all readers, illustrating them from American facts, so that at the end of the book the reader will have a fair knowledge of the economic history and condition of our own country. I may add that it is the work of a business man, drawn largely from business experience. I shall be obliged to any reader who will send me, in care of the publishers (providing that reply is not usually expected), criticisms, suggestions, or inquiries that may enable me to make the book more useful should the demand for it justify new editions. I shall be especially glad to know what parts prove to be hard to understand. I am chiefly indebted, for literary material, to the works of Adam Smith, Mill, F. A. Walk-

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er, Cossa, Perry, Ely ("Socialism"), and Weeks ("Labor Differences"), and, for friendly revision of statements or figures, to Messrs. D. A. Wells, Hadley, Atkinson, Shearman, and Henry George. I inscribe this little book to the Society for Political Education, in the cause of which it is written.

R. R. BOWKER.

New York, March, 1886.

It has been gratifying that this book, which was adopted for use in the Chautauqua reading-courses and in many schools, has been there and elsewhere of sufficient service to authorize successive editions, of which the present is the fifth. In this edition earlier figures are replaced with those of the 1890 census and of later statistical reports, except in cases where no figures on the special subject were available later than those given. I am indebted especially to Edward Atkinson for bringing to present date his useful calculations. Again I thank the friendly critics and correspondents who have aided me with suggestions.

R. R. B.

NEW YORK, October, 1896.

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ECONOMICS FOR THE PEOPLE.

I.

A COMMON-SENSE STUDY FOR EVERYBODY.

When I was a boy I liked to buy and sell, with pins as "make-believe" money. Then I began to collect stamps. I had a friend whose father used to trade with South America and had stacks of musty old letters with the rare "big number" Brazil stamps. Of course he wanted only one of a kind for his collection, and was glad to trade off others for some of my European stamps. I lived in New York, and there I could get for the big Brazils more stamps than I gave, or could sell them to the dealers for money. Presently I hit on a plan the dealers had not then thought of. I bought small pieces of English and French gold, and sent them in letters to postmasters in the col-

onies, asking them to send me the money's worth in unused small stamps. Some of them I never heard from, but the others sent me enough to pay all the losses and a profit besides when I sold my stock to the dealers. Then I opened correspondence with a Liverpool stamp-dealer and one in Hamburg, buying United States stamps to send them. I made quite a little money, which I found I could put in the savings-bank so as to get interest, and I got a collection worth a hundred dollars, besides learning from the postage-stamps, as any thinking boy does, a good deal of geography and history.

All this was "doing business," just as men do it. My friend and I each got what we wanted, and each of us gained by the exchange. This is what any two men do in every "business transaction," else they would not take the trouble to do business. One or both of them may make a mistake and get less than he bargained for, or find the thing worth less than he thought, but neither trades unless he expects to gain by it; no law in our day compels any man to sell or buy unless he wishes. First, I "swapped" or bartered, as savages do before they learn to use money;

later on I bought and sold for money; then I bought English and French money to do foreign business; and what I made I put into a savingsbank at interest. My profit became the capital which I used to buy other stamps, from which I made more profit. When we think about real business, we find that almost all of it is quite like these transactions. The desire of every man to get more is at the bottom of it all, and all that one reads in the newspapers about capital and interest, value and price, banks and panics, can be thought out till they are seen to be just like my boy business.

ECONOMICS is the science which deals with these things. There have been a great many definitions of it—the science of production, the science of wealth, the science of exchange, the science of gain. All these definitions come to much the same thing, for Economics tells how wealth is produced by exchange of one thing for another, in which each man gains. At the very beginning, a man who digs in the earth exchanges his work for the product he gets out of the ground, and as soon as he can save some of this product wealth begins. So we may also say that Economics is the science of work and wealth; but whatever we call it, and however we define it, this study is that which tells how and why *business* is done, how and why men trade. For every act of business is, underneath, a trade between two men, exchanging goods or services so as to gain.

The name Economics (œco-nemics) comes from two Greek words, oikia, the household estate, and nemein, to manage, and means household management, or the management of what one owns. The name Political Economy (from the Greek polis, city, which was to the Greeks the same as state or nation) is also used, because the wealth of nations is only the wealth the people own, put together, and economic laws are the same for the few or for the many. Some States, indeed, as Massachusetts, are called in their legal papers a Commonwealth. Each home or household earns so much and spends so much: the difference is the wealth of that family; and the wealth of all together makes the Commonwealth.

Economics has been called "the dismal science," because some people think it is uninteresting and hard to understand. But it is really a simple matter, and when one understands it fairly, a great

many perplexing things become plain, and the study is very interesting. It is only common-sense applied to business. The best way to keep the study easy and interesting is to take up the real facts that one reads of in the newspapers, and ask one's self how the economic law one is studying bears on them. I know one teacher who reads his class a business article out of the daily paper, and then talks about that. I know another who tells his boys to ask him questions about every-day affairs, and if their questions show honest thinking he marks them as though they had recited well. Or he puts the names of books or newspaper articles on the black-board, and after his class has had time to read them, makes them think out whether the writers are right or wrong. This thinking for himself is what every reader should try to do.

Every boy who likes to "swap," or who means some day to earn his own living, every young man starting in business, every girl who wants to understand what she hears men talk about or what she reads in the papers, every woman who goes shopping or who keeps house, ought to know something about Economics. For there is scarcely any one, the richest or the poorest, old or young, who

is not affected by economic laws. Away out on a Western farm, for instance, the farmer's wife can't get the new dress she needs. Why? Because the corn her husband raised last year brings so little money that he must hold it over for better prices, or wait till he can feed it out and so sell it in the form of cattle or hogs. Why? Because railroad freights are so high, and prices in Liverpool, and therefore in Chicago, are so low. And freights and prices go up and down according to those laws of trade which Economics teaches. The whole world in these days is a great House-that-Jack-built, the big things and the little things all depending on each other. And sometimes, if a farmer, for instance, knows these laws of trade, he can guard against mistakes, just as by looking at a weather-glass he can save his hay before a storm. Sometimes, too, he can help set wrong things right, by thinking them out and talking them over and casting his vote, perhaps, for a Congressman who thinks the right way.

OF EARNING A LIVING AND USING LEISURE.

THE first thing every one has to do, when his time comes, is to earn a living. The second is to earn leisure. This is another reason why young people, in particular, should understand Economics. They ought to desire to earn their living in the best way—that is to say, in the most honest and surest way. And they ought also to look forward to using leisure, when they have earned it, so as to get the most good out of life.

Now this applies not only to boys as they become men, but to girls as they become women. There are a great many ways of earning a living, with the head as well as with the hands, and by making it easy for other people to work, as well as by what is commonly called working. Many a girl has fairly earned her living by making her father cheerful for the next day's business per-

plexities, and many a woman by helping to make others happy, or by bringing up children who will in their turn do the world good service.

For the key to all honest earning of a living is to do service. And there are many kinds of service. The first kind is that of the men who add value to materials by work and are direct producers. First of all comes the work of those who get from the earth, by hard labor, what Nature has to give us—the farmers, the miners, the fishermen. On them everybody else depends, and they are the great body of the people. The census of 1890 showed that there were then 62,600,000 people in the United States, of whom 22,700,000 were workers; and of these two-fifths (8,560,000) were farmers or farm-hands and the like. The 387,000 miners and quarrymen and 60,000 fishermen should be added to them. Next comes the work of the manufacturers and their workmen, who make the products of the farm and of the mine more valuable by working them into other forms, of whom there were over 5,090,000, or above half as many as farmers. The work of the wagoners, the railroad men, and the sailors, who carry crops and manufactures to the place where they are needed,

and that of the traders and bankers, who keep them in store till the time when they are wanted by buyers, come next, and in "trade and transportation" there were 3,300,000 engaged in 1890, including 500,000 railroad employés and 55,000 sailors. Besides these, 1,900,000 "laborers" were reported by the census, who probably do this direct work.

The second kind of service is that of the people who work indirectly by helping others, who are only indirect producers. There were over 3,400,000 of these in 1890, 1,400,000 of them domestic servants. The 104,000 doctors, for instance, keep us well, so that we may do our work; 80,000 lawyers see that justice is done, and as many clergymen preach morality, without which business could not be carried on; 79,000 officials and employés are employed to administer government, besides 27,000 soldiers and sailors to protect us; 341,000 teachers train children to be serviceable men. In this class. also, come the great body of women, many of whom are not classed as workers by the census, and cannot be taken account of in Economics, because they do not exchange their labor, though they do a real service to their fellow-beings and to their country.

A third kind of service is that done by artists, musicians, and others who serve us by ministering to our pleasures, though they increase production, if at all, only by putting us in better temper for work. But this also is real service, and because few people have the gifts to serve us in this way, we are willing to pay often very high prices to those who can. As a matter of fact, many callings, as that of a writer, combine two or more of these kinds of service.

There are also classes of men who do not earn a living, but simply prey upon the other people. Among these are the thieves and other criminals, who are supported in jails at the cost of the working people who pay the taxes, unless they are made to do wholesome work inside the jails; and the paupers and beggars who can't or won't work; and the gamblers of various kinds, who get money, not by earning it, but by betting it away from other people's pockets into their own. Much of the "business" called "speculation" is of this sort; men simply bet on what the price of gold, or stocks, or wheat, or oil will be a few days hence, without in any way adding value to the goods, just as a man in a gambling saloon bets on what

cards or dice will turn up next. A man in a western city was arrested for gambling with a "speculating machine" which showed at the turn of a wheel the names of various stocks, or of wheat, pork, oil, etc., joined hap-hazard with figures of prices on a great indicator-board such as stockbrokers have in their offices, so that people might bet on what would come next. But many men "on the street" gamble in exactly the same way, though the law cannot reach them. Thus more cotton or oil has been "sold" in New York in a single day than the whole stock in existence, and perhaps not a bale or barrel has been touched at all.

There is much honest and useful business done by bankers and brokers "on Wall Street," but it is not of this sort. We hear a great deal about great fortunes made "on Wall Street" in this way by men who are mere speculators or "railroad wreckers," but such fortunes are not honestly and honorably made, and usually are soon lost again. These men do not earn money, they only "pluck" others. No one ought to desire to make fortunes by gambling of any sort. Nor ought any one to wish to spend money without earning it, as by holding any government office which is a sinecure, and drawing pay without doing work. And every man who inherits money ought to feel that he cannot rightly spend it without also working himself.

These are distinctions nowadays very much confused, but which ought to be clear to every boy or man making his choice in life, and to every girl and woman who knows business men. For if public opinion, especially that of women, called such "speculation" by its right name of gambling, and despised it accordingly, the whole country and each person in it would be better off.

After a man is earning his daily bread by work, he tries next to earn more than he needs day by day, and this saving or wealth gives him the right to leisure. This is the test of success. A country is prosperous when its people, by working a few hours in the day, can have the other hours "for themselves," and when, also, the men can earn so much that the women and children are spared hard work. The women can then use their time to make their homes what they should be, and the children can get the schooling which our free schools offer them. But this leisure is not good,

and may be bad, if it is not well used—if a people use their savings and their leisure to get drunk or to put bad into life instead of getting good out of it. It is for this reason that education is important, so that the man who has earned leisure may be fitted to enjoy books and pictures and music and nature and travel and all the higher things at their best. A man who has studied Economics and put it to good use is better fitted to enjoy both his honest and well-chosen work and his wellearned and delight-giving leisure, and this is a great gain.

On the other hand, a man who is ignorant loses. Ignorance is costly. A farmer, for instance, remembers that last year potatoes were very high, so this year he plants all the land he can in potatoes. Very likely the price is low and he loses money. If he had studied Economics, he might have learned that after a very high price one year a great many people rush in to plant that particular thing, and the price falls below the average. So, too, an ignorant man who is smart enough to earn money and leisure doesn't know what to do with them. An ignorant servant-girl, not knowing how to read or write, who had been married by a rich man, had to stay in bed a good part of the day to "kill time." This is an extreme case, but there are many men and women who do not enjoy life half as much as they might if they had educated themselves at the beginning so as to make the most of their time.

III.

SOME MISTAKES ABOUT ECONOMICS.

Some people say that it is not worth while to study Economics because it is not exact in its conclusions. That is, it cannot tell a business man that this month will be a good month in which to sell, and next month a good month in which to buy, or that he can be sure to make money by doing soand-so. In fact, Economics is not an exact science. as arithmetic is, in which we know surely that twice two is four and can't be anything else. But much of our knowledge that is of most practical use comes from studies which are not exact. A farmer might as well say that he wants to know nothing about the weather, because he cannot be sure that the last week in April will be rainy and the first week in July hot. If he could have a weather science that would tell him the heat and rain and sunshine for each day in the year, then indeed he could

plant with some certainty about his crops. Yet, as a matter of fact, he seeks to know all he can, however imperfectly, about the weather. He relies surely on the general facts that winter is cold and summer hot, that spring is seed-time and autumn the time of harvest. Then he seeks to learn from his weather-wise neighbors the signs of the clouds and the sun, the birds and the flowers, the barometer and the weather-glass. Finally, out of this study of the weather there comes a science, and the Weather Bureau warns him of the coming of a great storm or of a season of drought, which it foretells from the telegraphic reports or from the spots on the sun. It cannot tell him that at three o'clock Thursday there will be a shower heavy enough to spoil his hay, but its warning is nevertheless a real help. Millions of dollars have been saved to the farmers of this country by the predictions of the Signal Service. It is the same with Economics, and with many other studies. It has its foundation facts, its general laws, its specific applications. It is a great help, but it does not claim to tell the day and the hour at which prices will go up or go down.

Others say that it is not worth while to study

Economics because economists themselves differ. and "when doctors disagree, who shall decide?" Yet it is true in medicine, which is also an inexact science, that while two doctors may disagree as to the exact kind of sickness of a patient, and the specific remedies that will make him well, and even quarrel desperately over "old school" and "new school," yet doctors do agree as to the general laws of health and of healing, and, despite all their mistakes, do help people to get well. So, also, ministers of different denominations disagree as to doctrines, but they agree as to Christianity and its power over life. The same is true of economists: all recognize the great truths, almost all recognize the same general laws; there is still much division on specific applications.

But it is also true that schools which differ in methods arrive at the same results. The English or Manchester school, as it is called, taking up many of the ideas of the earlier French economists, and including the great Scotch and English economists from Adam Smith to Richard Cobden, thought most about the great laws which *must be*, and so they are called the *a priori* or scientific economists. They considered Economics almost an exact sci-

ence, and showed that because of such-and-such laws such-and-such things must come to pass. The German or "national" school, to which many of the later English and American economists belong, seek to find out what has been the historical experience of nations as to economic matters, and so they are called the empirical or historical economists. They consider that even great laws act somewhat differently as applied to nations in different stages of growth, and claim that we must look not only at laws, but at historical events and the circumstances of individual peoples. In their view Economics is a science only as physiology is a science: in both small circumstances influence. and great events modify, great laws. Christianity, which is so great an event in history that we date everything from the birth of Christ, introduced certain springs of action, like the "golden rule," which have had the greatest possible influence upon the action of economic laws.

But the scientific and the historical schools of economists, after all, reach much the same conclusions and confirm each other's results. When the French merchant Legendre was asked by Colbert, minister of Louis XIV., what the Government

should do for the merchant, he answered "Laissez faire"—"Let us be," "Do nothing." This phrase became the cry of the Manchester economists, who said that Government should do nothing to interfere with the natural course of business. The historical school studied the same subject as a matter of experience, and most economists come to the similar conclusion that a people gets on best when its Government does only those things which ordinary business organization cannot do as well. But there is great difference of opinion as to the application of this conclusion—for instance, as to whether Government can best manage the telegraph and railroads.

Still others say that it is not worth while to study Economics, because it is largely a quarrel about words. This means that economists have generally given much space to explaining what certain words, such as "wealth," "property," "value," and the like, do mean, and what they don't mean. When "Alice in Wonderland" meets Humpty Dumpty, he tells her that he makes words mean what he wants them to—otherwise, what is the use of having them? Perhaps Humpty Dumpty was making fun of economists. But a great many words

are carelessly used, and mean somewhat different things to different people, and it is said that half the quarrels in the world have come from misunderstandings about words. Therefore it is of first importance that a writer should make clear how he means to use a word, and that his readers should keep that meaning clearly in mind. But it is foolish to waste time in quarrelling with another because he uses a word whose meaning is not absolutely settled, in another sense than that you would give to it. As the science of Economics progresses, the scientific meaning of its words becomes more and more settled.

An example is the word wealth, which expresses the object of Economics. It may be said that there are two kinds of wealth—possible wealth and actual wealth, or wealth potential and wealth produced. Every young man who has health, ability, and skill, has, we often say, the best capital for life; and so a country which has many such men may be said to have great wealth. So it is said that every able-bodied man among the 788,000 immigrants who came to the United States in 1882, or the 279,000 in 1895, was worth \$1000 to the country. A wise statesman ought to do all he can to promote

good habits of living among the people, and to encourage immigration, for the more workers the more wealth. Adam Smith used the word wealth in this broad sense. But this kind of wealth cannot be exchanged, and Economics cannot deal with it. Therefore, when modern economists speak of wealth, they mean usually wealth produced,—the fruits of work, not the possibilities of it. And most of them do not include in wealth either natural resources, as land, which cannot be increased or decreased, or mere evidences of debt. as promises-to-pay, which, if burned up, would be no loss of real value. Wealth in this sense is product, and not the possibility or the evidence of product.

IV.

WHO SHARE IN PRODUCING, AND WHAT BECOMES
OF THE PRODUCT.

NOTHING is produced except from the land or upon the land (the water and the air being included in the economic sense of the word land). The owner of Land which is farmed, or on which a factory is built, sells the use of this land and gets rent. Nothing is produced except by Work, and the man who sells the service of his body and its skill gets wages. But without tools, or machinery, or material to work on, a worker has a poor chance; therefore, to work at the best advantage, Capital is required, whether this capital is in the shape of a loan in money or goods, or of the use of a factory. The capitalist lending the money, or its equivalent, gets interest. Further, there may be a man who can also help production a great deal—that is, who can get more things produced by the same outlay of land, or work, or capital, because a fertile brain

makes him good at organizing or directing. This director of industry, as we may call him (the French use the word *entrepreneur*, which the Scotch economists translate "undertaker"), wants to be paid for this service of his Brains, and he is usually the business-man who takes the risk and is paid by *profit*.

Thus two elements *must* enter into production, Land and Labor, paid for by *rent* and *wages*, and two more are found of value in increasing product, Capital and Brains, paid for by *interest* and *profit*. To put it plainly—

	Land-owner		Use		Land	by	Rent
The	Laborer	S	Service	iis	Body	524	Wages
	Capitalist		Use	of 1	Capital		Interest
	Director		Service		Brains	anc	Profit

Of course one man may combine all of these, or any three, or any two. A farmer may own his land, and do the whole or a part of the work himself, and buy his house and tools and stock-from his own savings, and direct everything according to the judgment of his own brains. But in this case, if he is a successful farmer, his product must bring enough to cover the *rent* he would pay for

the land if he did not own it, and day's wages for himself, and the interest he might get for his savings if they were not invested about his farm, besides the profit his good management, if he is a good farmer, gives him. If a man does not get this much out of his business it does not pay. Some years prices may be up, and some years down, but if in the long run he fails to get this much return, he ought to know the reason why. It may be poor land, or bad management, or heavy freights, or too heavy taxes, but, in any case, he should look up the economic principles of his business and learn which.

Sometimes a man can wisely combine all these four elements in himself, and sometimes he cannot. It is sometimes cheaper to rent land than to own it, though here a great many side considerations enter in, and a country is better off when its people own and cultivate their own farms. Usually a man of brains can better afford to hire men and direct them, than to work all the time with his own hands, while men with less brains are better off, and not worse off, because he finds work for them which pays him a profit. The same kind of mistake is made by employers who try to "save

wages" by employing too few men, and by employés who try to get along without allowing for the usefulness and pay of brains. This has been the ruin of many "co-operative" enterprises, in which each man wanted to share absolutely alike, and would neither submit to nor pay for the directing man who alone could make a profit, and who could always get pay for his brains somewhere else. Capitalists are often willing, for instance, to pay this directing ability a large fixed salary in place of profit, and to take the risk for the sake of the profit remaining after the salary of such a man is paid.

For each of these elements of production must have its share of the product. *Production* is, of course, the first factor in Economics; without it there is nothing to exchange, or to share, or to use. But production only makes the wealth, or the no-wealth, of the miser who hoards. A man's work, applied to land or materials, produces his keep and a surplus, and this surplus—indeed all the product if a man is not producing the kind of things he needs for himself—must be exchanged. When, by the division of labor, one man produces more of one kind of thing than he wants for him-

self, and another man more of another kind than he wants, then Exchange begins, wealth is realized, and the whole machinery of Economics is set in motion. Exchange is, in fact, so close to production that some writers make both one division of Economics. The results of production and exchange must now be shared among the elements which contribute to those results, in the form of rent, wages, interest, and profit. This comes under Distribution, which division of Economics covers some of the most pressing questions of our day. What share the land-owner, the laborer, the capitalist shall get, is a question at the bottom of the social order, and one of the most satisfactory things in Economics is its teaching that the working population, who are the body of the people, are surely and steadily getting in wages a larger and larger share of the total product. Finally, product is of no good unless it is finally used or consumed. Consumption, the final purpose of production, is also the last division of Economics. This is one of the least studied but most important departments of economic investigation, since the balance-sheet of prosperity for every nation and the whole world, as well as for each man,

depends at last upon whether we are "getting ahead" by using what we consume so as to produce again to good advantage, or are "running behind" by using up product faster than it is resupplied. The wise farmer must have an eye to his seed; so the present must put aside part of the harvest of the past, that there may be harvests also in the future.

$\mathbb{V}.$

HOW VALUE IS PRODUCED.

THE key to all business is that men want things and are willing to work for them. When they get by work more than they want of one particular thing, they desire to trade with some one who has something else which they want and who wants what they have, just as a boy who has gathered a lot of chestnuts is glad to give half of them for a jack-knife, if he can find a boy who has one to swap. Now a man may easily have more than he wants of any one thing, but he never gets more than he wants of everything; that is, no man ever complained of being too rich, nor can the whole world be too rich. General prosperity consists in so directing production that men can buy what they want, and so adjusting distribution that men who want, and who work to supply their want, can have power to buy.

The first question then is, what men want. The answer to this varies with the people of whom we are talking. Adam and Eve at first wanted nothing. The savage wants little—and has a hard time getting that. The civilized man wants a great many things of many different kinds. An American, accustomed to comforts and "modern improvements," wants a greater variety of things than men of most other nations. A common country store, for instance, on its hardware shelves alone, offers at least five hundred different kinds or sizes of things; and in New York City probably at least a million different articles are kept in stock in the different kinds of stores. A man's wants depend upon the standard of life of the people about him, and upon how he himself lives.

Of course each man seeks to get what he wants as easily as possible. He tries to get the most that he can, and pay for it the least that he can, whether he pays in money or with work. If Farmer Jones wants to sell his potatoes, he tries to find the man who will buy dearest, so that he may get the most he can for his summer's work; if he wants to buy potatoes to plant, he tries to find the man who will sell cheapest. This is the great

fact at the bottom of all trade. It is the law of self-interest.

For a long time people took it for granted that one man's gain must be another's loss, that each man's self-interest was against that of every other man, and that each nation's self-interest was against that of every other nation. This would make trade always a kind of war. But when Adam Smith, in 1776, the year of the Declaration of Independence, published "The Wealth of Nations," the greatest of all the books on Economics, he made it very clear that it was not true that one man loses as another gains. This is true in mere speculation, but not in real trade. If Farmer Jones grows more potatoes than he can use, and wants money, but Doctor Smith wants potatoes more than the money for which he can buy them, both gain by the exchange. Trade is a voluntary act, and thrives by peace and not by war; for peace lets people do as they choose, and war makes them do as the war-makers compel them. Therefore men nowadays speak of "enlightened self-interest," and see that in free exchange both sides gain.

Anything that can be exchanged or must be

bought is said to have value, that is, power-in-exchange. Those things which everybody can get for nothing, as air and daylight, though they are the most useful things in the world, are not spoken of as valuable. Other things may be very hurtful, as poison or bad liquor, but they are nevertheless said to have value, because people may want them and be willing to pay for them. The difference between value and utility depends on whether people must pay for things or can use them without paying for them. Even air and light may become valuable; in a great public hall full of people, each of whom breathes many cubic feet an hour, air is pumped in at great cost; and in the evening we are glad enough to pay for light, whether for our work or for our pleasure. In these days we can not afford to save money by going to bed early, as people used to do in old times. But nobody will give anything for air out-of-doors, or for sunlight in daytime, though their utility is above everything; for any one may have all he can use without paying.

Even the animals work for their living, applying labor to get what nature has to give them. Those who live on flesh hunt their prey, and even the

monkeys, who feed on nuts, must apply labor to pick them off the trees or from the ground. Moreover, the squirrels store up food for a future time: the father-birds carry it to the place where their young need it; the honey-bees rework it into honey. But man is the only being that barters or exchanges, and so has to do with value or powerin-exchange. There are three ways of adding value to the materials which by labor man obtains from the earth, corresponding to the work of the squirrels, the birds, and the bees. We must have what we want, when, where, and how we want it. Ice, for instance, is not wanted in winter, but in summer. It is not wanted up in the Arctic regions, but in our homes. It is not wanted in the shape of icebergs, but in convenient pieces that can be put into ice-boxes. In winter, or up by the North Pole, or in icebergs, it is of no value, we would say. The three kinds of added value, then, are time-value, got by keeping, as when ice is kept from winter to summer, which is storage; placevalue, got by moving, as when ice is taken from Maine to Louisiana, which is transportation or commerce; and form-value, got by reworking, as when ice is chopped into convenient blocks or

produced from water by artificial means, which is manufacture.

If we think over the work of those who are directly producers, we shall find that it adds some one of these kinds of value to what they work at, and sometimes all three. A farmer deals with form-value: he plants the seed and cares for the young plant, so that Nature, with her machinery of sun and air and rain, may transmute it into rich harvests of golden grain or rosy fruit; or he feeds and fosters the young of his stock until the hay or corn, by this same mechanism of Nature, becomes flesh for food or muscle for work. The wagoners and railroad-men and sailors help to add place-value by transporting the crops to market. The merchant and banker help to add timevalue by enabling goods to be kept till they are more in demand. The machinist who keeps a machine in order helps the machine to add formvalue to its product; and so we may say, too, that the doctor and the household servant help to keep the human machinery, that is, our bodies, in good working order, and the lawyers and clergymen and Government officers keep in order the social machinery on which so much depends. But, again,

it is the farmer, the hunter, the miner, who do the foundation-work, and supply the raw materials for manufacture, as each manufacturing process in turn produces the material for the manufacture next above it.

Value may be taken away, as well as added, in each of these three ways. Grain may rot, or it may be sent by mistake of judgment where it is not wanted, or it may be kept over till the next harvest, when prices are down. Thus a man may keep the very same things from year to year, and become poorer and poorer. A man who was rich with a storehouse full of hops when they were a dollar a pound, is poor when they fall to twenty cents.

There is another kind of increase of value, however, which is not produced by work, but by scarcity. The picture of a great painter, or the autograph of a great man, now dead, or the few existing postage-stamps of a past government, or the few remaining bottles of the wine of a certain year, have this scarcity-value from the fact that the thing cannot be reproduced, no matter how much and how many more people want it. No demand can increase its supply. And if some of

these few things are destroyed, the others increase greatly in power-of-exchange, just as, when fire burns or war destroys great quantities of food, the power-of-exchange of what is left is much greater. This scarcity-value, or, as it is sometimes called, "monopoly-value," is one element of value in land.

Now there are a great many things, as land and houses and railroads, which can change own. ers, but cannot change place. For such things the evidence of ownership is usually in written papers of some kind—the deed of land or of a house, or the "shares" of a railroad or manufactory—which are passed from the seller to the buyer. These papers are not in themselves wealth, but only evidence of the ownership of wealth. If an owner does not want to sell his land or house, or a company its railroad or manufactory, or a man his stock of goods, they sometimes issue another kind of paper promising to pay so much money at a certain time or else transfer the goods: this is called a mortgage. Or sometimes a man issues a promise to pay money at a future time, which is called a note. "Paper-money" is such promises-to-pay issued by a government. These are not wealth, for they could all be burned up without reducing the real wealth of the country. But in speaking of how much a man is worth, we often speak of them as a part of his property, and "property" in this sense includes (I) natural elements, as land, (2) true wealth, which can be destroyed, and (3) evidences of wealth or of debt.

A great mistake has often been made in taxation by overlooking the fact that there cannot be two values in one thing—that evidences of debt are not wealth. If a house is worth \$10,000 and is mortgaged for \$5000, the total value is still but \$10,000, and only this much can rightly be taxed. This end can be reached by not taxing the mortgage at all, or by taxing the mortgage for \$5000 and the house for the unmortgaged remainder of \$5000.

VI.

WHAT PRICE MEANS.

IN my boy days our business transactions were carried on with pins; instead of swapping two paper whirligigs for a stick of licorice, we put the price of a whirligig at five pins and of the licorice at ten pins. *Price* is value expressed by some one thing, and in grown-up business that one thing is usually money. When men say that the price of wheat is a dollar, they mean that this is the value or power-in-exchange of the bushel of wheat measured in money. It would be a great trouble to reckon that the value of a bushel of wheat is half a hat or twelve pounds of sugar. It is much easier to make a price in dollars and cents. In fact, a price-list of a hundred items in money would require 4950 items if each article were quoted in terms of every other.

It is very necessary to get a clear idea of what

price really means, and of what money really is, before going very far in Economics. A great many serious mistakes are made in business and in politics, because people are so apt to forget that as "it takes two to make a bargain," so it takes two values to make a price—the value of the thing priced, and of the thing in which it is quoted, that is, the value of the money. Wheat may be at one time the most plentiful, at another time the scarcest thing in the community; so that if hats remain of the same value, a hat may exchange one year for three bushels and another year for only one bushel of wheat. But if the value of hats varied in the mean time the same way with wheat, a hat would be worth one bushel of wheat all along; or if hats varied in the opposite direction, and became scarce while wheat became plenty, a hat might be worth six bushels of wheat. If values on both sides staved always the same, prices would never change. As a matter of fact, prices are changing all the time; sometimes things are "high" and sometimes they are "low."

Wheat was quoted in the New York market as high as \$3.45 a bushel (in 1866), and as low as 61 cents (in 1894). Raw sugar reached, in 1864, as

high as 25 cents a pound, but refined sugar could be bought in 1895 for 3\frac{3}{4} cents. Wool reached \(\)1.10 a pound in 1864, was as low as 25 cents in 1866, reached 67 cents in 1872, was down to 20 cents in 1878, was up to 50 cents in 1879, and down again to 21 cents in 1881. These are, of course, extremes of prices, and for the war years the prices are in currency. Hops sold in 1865 as low as 10 and as high as 65 cents a pound, in 1868 as low as 5 cents and as high as 55 cents, in 1870 as low as 3 cents, in 1882 as low as 17 cents and as high as \(\)1.13.

The value of all these things depended upon supply and demand. Value, or power-in-exchange, always depends upon the relation of supply and demand in the market quoted, under free exchange. Of course if a soldier in a raid, or a government in peace-times, forces me to sell a hat for half a dollar in poor money, or for whatever they choose to give, or if I myself choose to sell a hat to a friend for half its value—in other words, to make him a present of the other half—the transaction is not exchange and affords no measure of value. Hops, for instance, is a very variable crop, grown in but few spots, and dependent almost entirely on the one use of beer-making. In 1870 the crop had

been very plentiful in Europe as well as here, and the supply was vastly above any present demand. The price went down to 3 cents. In 1882 the foreign crop had failed, and our farmers got as high as \$1.13. This is a crop whose success depends so much on the season that no human foresight can prophesy next year's values; the farmers who held over their stock, and those who rushed into the hop business, were the next year well-nigh ruined. Wool is a steadier crop, but the passage of a high tariff on wool in 1866 induced so many farmers to go into sheep-raising that the supply greatly exceeded the demand: in 1868, 4,000,000 sheep were killed in this country for mutton, and the number of sheep in Ohio was reduced 43 per cent. in three years. Again the price went up; then the demand for wool fell off by the stagnation of manufactures, and the price went down. Here better foresight would have saved much loss. The variation in price in these cases was a real variation in the value of the individual thing.

When, however, prices in general go up or go down, it may mean a variation in the supply or demand of the things sold, as when general distress reduces the buying of a whole community;

or it may mean a change in the power-in-exchange of that with which we buy, that is, money. In July, 1864, what we called a dollar in this country would buy only 35 hundredths of a gold dollar, for the premium on gold made a gold dollar worth 2.85 paper dollars. Our dollar did not really represent a dollar's worth of coin again till December, 1878. A bushel of wheat priced at \$2.85 currency when gold was highest, would have been priced in gold at \$1.00 only; it seemed "high," but was really "low." An English penny a thousand years ago meant 1-240th of a real pound of silver, or 223 grains: it decreased, until since 1600 it has meant less than 8 grains. Again: the same coin or quantity of gold or silver had less power-in-exchange after the exploration of America began to increase the supply of the precious metals in Europe than it had before, although one of the reasons for the use of them as money is because they vary in real value less than anything else. Therefore, when we are reading in history, or in accounts of foreign countries, or in newspaper quotations, about prices and rates of wages, we do not get at the real price and real wage until we have learned what the "currency" is, and how much metal-value and purchasing power it stands for. The real test of wages, for instance, is the purchasing power of a day's work at the time and at the place mentioned. When, in the New Testament, "they received every man a penny," they received about 16 cents of our money, which was then a fair day's wage.

We have to remember then, about prices, that as goods vary in quality and value, so money varies in kind and in power-of-exchange. There is "good" money and there is "bad" money—money worth its face-value in metal, and so-called papermoney or promises-to-pay, which may come to be worth nothing. A dollar a day in good money may be better wages than three dollars a day in bad, for price is not named in the same kind of dollars both times.

VII.

THE LAWS OF PRICE.

"It takes two to make a bargain." In making prices there are always two sides — on the one hand the seller, representing the producer, and offering the *supply*; on the other hand the buyer, representing the consumer, and furnishing the *demand*.

When a man makes a thing "to order," the demand precedes the supply, and the two exactly balance. The producer gets the cost of production, including the fair return for his own labor and brains. Thus, if a man who usually earns two dollars a day should go into the woods, pick up dry branches, and make a rustic chair, taking half a day's time for the whole job, he would expect the price of a dollar for the chair. Or, if he paid another man half a dollar to get him the wood (part of which might be paid to the owner

of the land on which the wood was grown), and used a quarter of a day of his own labor, he would still expect a dollar. If everything were made "to order," or if men actually worked, under the same conditions, so as to produce exactly what was wanted, in the quantity wanted, in the place and at the time it was wanted, then supply and demand would balance, there would be neither scarcity nor waste, and the actual price would be the cost of production. But man is not a perfect being, and things do not come out, in economics any more than anywhere else, just exactly even. If our friend made his rustic chair in the ordinary course of trade, and then found that nobody wanted the chair or had the wherewithal to buy it, he would get nothing; or he might force a sale at fifty cents; or, if two men each wanted a chair right away, and there was only this one to be had, he might get two dollars instead of one. It is the relation of supply and demand that determines price.

Nevertheless, the *basis* of price is the cost of production. Prices cannot, in the long run, fall below that, for then producers would stop producing. Merchants who claim to sell everything

"below cost" are cheating either their creditors or the public. Yet some men or some farms produce cheaper than others can. Which cost of production is in this case the basis of price?

Mr. Smith is not willing to pay Farmer White more for potatoes than the price at which he could buy them from Farmer Gray, even though Farmer White's land is poor and he has had to work twice as hard as the other farmer; nor will Farmer Gray be willing to take a lower price than Farmer White can get because he raised the potatoes to better advantage. We must see how in this case the particular price is made.

Farmer White, Farmer Gray, and Farmer Black all have potato patches. Farmer White's land is poor for potatoes, Farmer Gray's middling, and Farmer Black's best of all. Farmer White has therefore to put the most work in, and Farmer Black the least. Now, allowing for his land, and the seed, and the labor he hires, and his own work, it costs Farmer Black 35 cents a bushel for the potatoes he raises, Farmer Gray 40 cents, Farmer White 45 cents. If only as many potatoes are wanted as Farmer Black and Farmer Gray can raise, Farmer Gray must get his cost of produc-

tion, or 40 cents; Farmer Black will want the same, though he gets five cents extra profit; and Farmer White will say to himself that it is not worth while for him to raise potatoes at the disadvantage of such a price, and he will turn his land to some other crop. But if the demand is greater than the two can supply, Farmer White must be called in; and as it does not pay him to grow potatoes at less than 45 cents, he will get this price and so will the other two, though now Farmer Gray makes five cents and Farmer Black ten cents extra profit.

This instance brings out one of the greatest general laws of economics—that price is based on the cost of production of that portion of the product produced at the greatest disadvantage at which it is worth while to produce. This price becomes the general price, and any man whose land or whose skill enables him to produce cheaper, gets the benefit of the difference, as we have seen. This explains what seems to most people a slap at common-sense—when economists say that the amount of *rent does not affect price*, a statement based on "Ricardo's law of rent." The reason is nevertheless simple: the price of pota-

toes is made by the poorest ground on which it pays to grow potatoes, and any land that grows more potatoes to the acre, or the same number with less labor, pays the difference to its owner in the shape of rent. It is "worth more." In like manner, if a smart farmer by good management can make the same kind of land grow more potatoes than his neighbor, he does not pay more rent, but he gets the difference in profit for his skill. There is nothing more important than that this law should be generally and clearly understood.

How important this law is in the practical direction of affairs is shown in the case of the Spanish treaty discussed in 1885. This proposed to let in sugar from Cuba without payment of duty, though the duty on sugar from non-Spanish countries would still be 1\frac{3}{4} to 2\frac{1}{4} cents a pound and 25 per cent. ad valorem. At first thought this seemed a good thing, as it was supposed that Americans might get their sugar nearly three cents a pound cheaper. But of the 2,754,000,000 pounds of foreign sugar used in this country in a year, Cuba sent, in 1883–84, 1,191,000,000, Porto Rico 138,000,000, and other Spanish possessions 295,000,000

pounds, and non-Spanish countries 1,130,000,000 pounds. We could not buy all we wanted from Cuba, because not enough is grown there; we should therefore have to buy from less-favored countries, whose sugar is imported under the disadvantage of the tax, and the general price would still have to be high enough to cover the tax. The Cuban growers would get this general price; it would be they, therefore, and not we Americans, who would profit to the extent of the duty; unless, indeed—as happened in the case of the Hawaiian treaty—a particular set of Americans bought up the sugar plantations of Cuba on speculation. Then the treaty would benefit not all Americans, but these few, until Cuba began to produce all the sugar we need, or the cost of production in other parts of the world was lowered in the competition, when the price would fall, and the speculators would lose in their turn.

As price, from the side of the seller, is based upon the cost of production of the portion produced at the greatest disadvantage at which it is worth while to produce, so price, from the side of the buyer, is limited by the desire for that portion it is least worth while to consume. If Dr. Smith

proposes to lay in ten barrels of potatoes, he will not pay Farmer White \$5 for the five barrels he must have, and \$1 for the five barrels he could get along without, but he pays for all at the lowest price at which it is worth while to buy any, and beyond which no more of this particular thing is useful to him at the price named. This "final utility" price, as economists call it, determines, from the buyer's side, the price of the commodity.

The instances of Dr. Smith and the farmers show the great law that there can only be one price in a given market for a given thing—that is, for the same quantity and quality of an article selling under like conditions at a given place and time. A starving man pays no more for bread at the baker's than a man who does not care whether he eats another piece of bread or not. A family pays no more for its barrel of flour for bread because bread is a necessity and cake only a luxury, than for a like barrel of flour for cake. Farmer White gets no more and Farmer Black no less for the same grade of wheat because it costs one more than the other to raise it. And this one price is the cost of that portion of the supply produced at the greatest disadvantage at which it is worth while to produce the "final utility" portion of the demand.

Price thus poises, like the pointer in the oldfashioned pair of scales, at the point where demand and supply counterbalance each other. The seller, who cannot replace his product by less labor, has no great desire to sell, and the buyer, to whom it is not useful at any higher price, is indifferent about buying; their desires are balanced; they trade on even terms. The limit on the one side is the cost of production at greatest disadvantage, below which producers will not continue to produce and the supply stops. The limit on the other side is the desire for the "final utility" portion, beyond which consumers will not buy and the demand ceases. The two are the same, because producers will always sell as high as possible and consumers will always buy as low as possible. There is a child's game in which the children say, "I want this thing twenty kisses." That is exactly what the potato-buyer says to himself: "I want these potatoes 40 cents; I do not want them 45 cents." But kisses are of unlimited supply, manufactured to order to meet the immediate demand. This is not so with potatoes and most things. The *normal price* is based on the single consideration we have discussed above, just as the normal temperature of winter is based on the relative position of the sun and the earth. But as weather is a variation from normal temperature, so *market price* is subject to a great many variations from *normal price*, as we have yet to see.

VIII.

MARKETS AND THE "MARKET PRICE."

A. T. STEWART became a great merchant largely because he introduced into "shopping" the true economic principles of price. He told his clerks to name only "one price," and this was always the lowest price he would take. This saved all the waste of time and trouble in the old-fashioned haggling, and each buyer paid the same price in cash for the same thing. This gave Mr. Stewart a great advantage over his rivals, who presently followed his example, until now in New York the "one-price" system is the rule.

Nevertheless, it still remains true, as John Stuart Mill points out, that in the small transactions of retail buying the economic laws of price have least chance to act. A country village often has trade enough only for one store, so that there is no competition price at all, partly because buyers do not

know the "market price" at competing stores, partly because it costs them more to fetch their purchases from a distant place than to pay the price asked by the village store-keeper. In the first case the buyer suffers because of his ignorance; but in the second case the buyer has, after all, little cause to grumble, because it is evident that the store-keeper is doing him a service. When the village grows large enough to support two stores selling the same kind of goods, then competition begins to act, and the price obeys more closely the general law. Even if there are two stores, the system of getting credit often ties a customer to one of them, and the store-keeper "puts on the price" without fear of losing him. Or it is a matter of fashion, or habit, to buy at one store rather than another. Above all, the retail buyer, who cannot be an expert judge of everything he buys, or cannot spare time to test everything, is willing to pay a "good price" when he is sure of "good value"—in other words, to pay a premium for honesty and good judgment on the part of the store-keeper. "Retail buying and selling," says Professor Cairnes, "is thus made to rest upon a moral rather than an economic basis."

But aside from this question of retail buying, there is in general a difference between normal or "ought to bring" price and market or actual price. A dealer often says, "I ought to get a dollar for this, but I will let it go for ninety cents." If he is talking honestly, he means that the *normal price*, the cost to him and his proper charges, would be a dollar, but the *market price* is only ninety cents—for if he could get somebody else to give him more than ninety cents, he would not sell at less to you.

It is very seldom, in fact, that the market price is exactly the same as the normal price, although values inevitably tend to the cost of production. Moreover, the difference of time and other conditions between the making of an article and the selling of it, tends always to make a new normal price, based upon the cost of reproduction, that is, of production now. It is always the present conditions of supply, the amount of labor by which an article can be reproduced or acquired now—as by new machinery replacing hand-labor which gives the basis for its present power-in-exchange. This power depends upon the actual relations of supply and demand—the amount of a given thing offered at the price and the amount

of it desired at that price. If the supply is short the price goes up, and the supply is then likely to be increased by increase of production, or by drawing from the stock or potential supply held in other markets, or withheld from market because the price was so low. A market, in the sense in which economists use the word, includes those who stand ready in any one place or under like conditions to buy or sell to each other the same lines of goods. There is, for instance, one market, and market price, for wheat at a farmer's barn-door, another at the Western flour-mill, another at Chicago, another at New York among the great grain dealers, another among those who sell to grocers, another between grocers and their retail customers; finally there is the great world's market at Liverpool, where the wheat of America competes with that of India, and where the prices that are at the base of all other markets are made. Thus, if there is so much wheat from other countries that only \$1.02 a bushel can be had for American wheat in Europe, the price in New York is likely to be this, less cost of transportation across the ocean, handling and dealer's charges, or say 90 cents, while grocers in New York would have to pay say 93 cents, and the purchaser of a single bushel 98 cents; the price in Chicago, the New York price less the cost of getting it to the seaboard, say 80 cents; the price at the mill or the train still less. Each of these is a separate market, between which the price varies according to the cost of transportation and other charges. If it should happen that scarcity in the Milwaukee market should lower the supply below the demand of the flour-mills there, prices might go up till it paid to increase the supply in Milwaukee from the stock in the Chicago market.

In all this series of prices the normal price should be the cost of producing the wheat plus the cost of handling and transporting to the country railway-station, to Chicago, to New York, to Liverpool. The real or market price seems to be made the other way: the farmer gets the price at Liverpool less the cost of transportation thither. Yet the contradiction is seeming rather than real, for when the price gets so low that it "does not pay" farmers to raise wheat, the acreage is reduced and wheat has to go up again. The farmer is sometimes told that he ought to get a better price by encouraging a "home market," and not depending on Liverpool prices. But "America feeds the

world." In the year 1891-2 we raised 611,000,000 bushels of wheat, and of this exported 225,000,000 bushels that we could not eat at home; and if we undertook to "get along without abroad," the glut would sink prices out of sight.

The real difference between normal and market price comes from what may be called friction in Economics, the actual failing from the free conditions of production and competition presupposed in theoretical economics. (1) Men may already have produced in excess of current demand: a stock exists. If this suffers by keeping, as fresh fruit, the price falls almost without reference to the cost of producing. (2) It is not always possible for production to respond at once to an increased demand: a large "plant," as costly mills, or time, or a reorganization of industry may be necessary. Prices then rise. (3) The substitution of one article for another when prices are raised—as happened when coffee became so high during the war that rye, dandelion root, and such things ground together, were sold instead as "combination coffee"—checks the rise of prices beyond certain limits. (4) Custom or habit influences price: it is customary to pay a penny to a boot-black in London, and five

cents in New York. (5) The coinage system affects price, particularly in small transactions: when, after the war, the price of blacking boots was lowered, it went from the ten-cent price to the five-cent price; all theatre and similar charges are at "even" rates; the pay of "day's labor" usually rises or falls by quarter-dollars or dimes. (6) The "tone" of the market, the result of moral and intellectual factors, dealing with the previous conditions, has perhaps the strongest influence of all on the market price at any given moment. The seller offers or withholds, the buyer purchases or declines, according to his judgment of present facts and future probabilities of prices. Thus a rumor on the street, a panic, become real factors in price. In stock speculation this cause alone leads to large percentages of variation in price, while the utility of the wealth represented remains closely the same. It is said that prices-once went up "a point" on the New York Stock Exchange just because Mr. Thomas Hughes ("Tom Brown of Rugby"), who was visiting it as a looker-on, made a cheerful speech. All these causes really affect price, aside from any question of good or bad money, which nominally affects price more than all.

TX.

ABOUT COMPETITION.

THE man who makes two blades of grass grow where only one grew before is set down as a benefactor to the race. In like manner, he is a benefactor who enables twice as much to be bought at the same outlay of work. Civilization is measured largely by the reduction of prices brought about by competition. That we buy better shoes at three dollars a pair than the last generation got for six, is one of many facts which are great milestones in human progress.

Competition (from the Latin con, together, and petere, to seek) means the striving together of two or more rivals for the same end. The man who can do more or better work (or its equivalent, the same work for less money) gets the work to do; the trader who can sell goods cheapest gets the business; the improved method or machine su-

persedes the old. It is the natural way of choosing the most fit. Thus the "competitive examination" for the Government service is the means of finding out which of several candidates can do the people's work best. Competition in Economics is the same as the law of the "survival of the fittest," or "natural selection," in nature. It is the natural order of affairs by which each man is required to work at his best, and under which each man works to his best advantage. The man working at the best advantage produces at the least outlay of labor, and therefore at the least cost. Thus prices are reduced. When competition is restricted, a man is prevented from doing what he can do best. Thus prices are raised. There is less work done, and nobody is better off. The poorer worker, who thinks he gains by restricting the smarter man from doing more than he himself could do, gets no more work, and no more money for his work, and finally pays more for what he buys. He simply brings the smarter man down to his level, instead of trying to be smarter himself. Competition has produced labor-saving machinery, and labor-saving machinery, after the unavoidable loss in changing, has reduced

prices and bettered the condition of laborers every time. Competition in trade has thrown out unnecessary middle men, who were thus set at work at new production, and so also has reduced prices for the general benefit.

For instance, in the poor part of a crowded city there are five groceries, paying five rentals and supporting five grocers' families. A new shop sells goods a cent a pound cheaper, runs three grocers out of business and hires the other two as clerks. The three, who had been competing with one another as much as they knew how, cry out against the evils of competition. But now all the poor people about save money, and after a time the three middle-men begin to earn their living at raising potatoes instead of handling them, and so help to make potatoes still cheaper. If the new grocer gets rich, it is by doing a service to the poor people about; and if he puts up prices again, "competition" will bring a new rival for the trade. All this is what actually happens; and though for the time it is hard on the men thrown out, they also come out right in the end.

Yet it is often said, especially in "hard times," and by those thrown out of work, that if we could

only get rid of competition we would all be better off. That is a mistake: a few would be better off, because they would get greater profits or higher earnings, but the many would be worse off, because they would have to pay higher prices, that is, give more labor for what they buy. Competition, by reducing profits and the return to capital, gives to the great body of wage-earners an increasing share of product; this tendency would be checked, and labor would suffer most. But, also, we cannot "get rid of" competition, any more than we can get rid of the law of gravitation. All natural laws have their ill side: gravitation, which keeps us firm on our feet so long as we are on solid ground, knocks us to pieces if we attempt to walk off a house-top or over the opening of a pit. It is not the law, but the attempt to ignore it, that gives us trouble. "Hard times" are not the result of competition, but come rather, as we shall later see, from misdirected production, unequal distribution, and unproductive consumption.

The principle of competition is abused when a merchant, or a "trust," or a railway, sells or carries below cost, to crush out a competitor—an "over-competition" which invites bankruptcy,

when creditors or shareholders pay the loss, and reacts to bring about too high prices afterwards on other goods or rates. Such abuse has led to the popular feeling against trusts, and to the governmental regulation of railways.

The action of the law of competition is limited, in respect to wages, by the willingness of the laborer to work for the compensation offered. If a number of workers agree that they are not willing to work below a given price, that price must be paid, or the work given up, unless other workers can be found willing to work for less. Thus the law of competition is met by the principle of association. It then acts wholesomely to keep up the compensation of the laborer, just as gravitation acts to keep up a house built of stones put together one on top of the other. This is the natural offset to the endeavors of great employing powers to keep down the pay of the human machine. Trades-unions have been one great means of accomplishing this end, and have thus supported the natural tendency of competition to give an increasing share to labor, against the efforts of the employing class to increase or keep up profit.

If, however, such voluntary combinations, either of producers of goods or sellers of labor, go on to

restrict others from offering at a lower price, or to prevent the doing of work, such enforced restriction interferes with the rights of others, and does wrong. The artificial limitation of competition has almost always resulted badly. Combinations to prevent "under-selling" seldom work permanently, because they are devices to prevent smart men making "large sales and small profits," and are opposed to the natural order of affairs. On the other hand, when trades-unions undertake to prevent less skilled laborers from working for what they can get, they set up the same kind of combination of the strong against the weak which they were organized to resist. Thus, in seeking to restrict competition by equalizing the work of good and poor workmen, and to limit apprenticeship for the sake of keeping up the price of labor, tradesunions do very serious harm on one side, offsetting their great usefulness on the other. The clerk of the chief criminal court in New York has said that the great increase of young criminals in that city was due not so much to flashy literature, as is usually supposed, as to the restriction of employment for youths by the refusal of the unions to permit more than so many apprentices to a shop.

A most important natural limitation to competi-

tion is in the fact pointed out by Professor Cairnes, that in the stratified condition of modern society, caused by division of labor, there are many "noncompeting groups." The farmer, the mechanic, the merchant, the doctor, cannot turn advantageously to each other's work, and so do not under any usual conditions compete. This holds true, also, as Mr. Mill has pointed out in his theory of international trade, between men of different nations, separated by distance and other barriers, and by differences of race, of climate, and of other natural conditions, prevented thus from free movement and kept under differing conditions of work.

As a result of the fact that competition between men of different nations is not direct and complete, we find that the effort required to obtain an imported article in an importing country is not measured by the labor required to produce it in the country of production, but by comparative costs in the two countries. Thus Buenos Ayres, with its great cattle-plains, used to sell our merchants hides, say at half the price at which we could produce a full supply for ourselves before the great cattle-plains of our Far West were used; but the Lynn factories could make shoes at a

quarter the labor at which the Buenos Ayres shoemaker could make them. Thus our people, at the cost of half an hour's labor, could buy from the South American what would otherwise cost several hours' labor. Foreign trade gains us certain goods at much less cost of capital and labor than we could make them for; while, as in all free exchange, the foreigner also gains, because he gets more than he could make for himself. By getting from each country the goods it can produce best, just as a business man selects for a clerk the man with the best head, and for a porter the man with the strongest arms, we spend our money—that is, we exchange our own work—to the best possible advantage.

The whole tendency of progress has been to break down barriers and make communication, that is trade, that is competition, more easy. For this we make roads, build bridges, tunnel mountains, dig canals, improve harbors, breed beasts of burden, invent machines of transportation, such as wagons, locomotives, and ships. We learn foreign languages and study the habits of other people with the same purpose in view. That social state is the most healthful which offers the widest eco-

nomic freedom, or chance to compete, consistent with protecting the weak against the reckless strong. Years ago, however, nobody saw this, and even now many fail to recognize its truth.

The statesmen of old Rome passed laws that gold and silver ought not to be exported—a system which Professor Perry calls the Bullion system. During the Middle Ages, and particularly among French statesmen, the Mercantile system developed, the purpose of which was "to sell to foreigners more of our productions than they will sell us of theirs;" that is, to make exports greater than imports, getting the balance in gold and silver. In 1667 the Protective system, of laying tariff taxes so as to keep out foreign goods and compel production at home, came into vogue with the French protective decree of that year; and it was not until the eighteenth century that the Natural system of free exchange began to find strong advocates, of whom the greatest was Adam Smith. All earlier systems were attempts to regulate prices and restrict competition, and were the forerunners of the protective policy which, despite the trend of America for freedom, has long ruled the United States.

FOREIGN TRADE AND THE BALANCE OF TRADE.

Two views of foreign trade join issue in Economics, under the names of "Protection" and "Free-trade." The protective system claims that by raising prices through a tariff, or series of taxes on foreign goods, a "home market" can be developed and new industries created so as to increase production, profits, and wages. The free-trade system claims that "the world's market" is needed for the full development of production, that we cannot sell freely unless we are free to buy, that each man and each nation should do what he or it can do best, and that obstacles in the way of freedom of exchange misdirect production and decrease wages.

The tendency of progress has been to break down barriers between nations, and no people have done more than Americans in promoting freedom. The doctrine of "Protection" has nevertheless continued the economic policy of the general Government, though freedom of trade exists between the States, as guaranteed by the constitution. Its aim is to identify economic groups with political divisions, whether or not these correspond to race or geographical or other real divisions, with the purpose of making each nation complete in itself and independent of all others by "diversifying industries," as it might be if isolated from other nations by war.

The "diversifying of industry" usually means the promoting of manufacture in preference to agriculture, by admitting foreign goods only at the disadvantage of a high tax, which raises the price of the "protected" articles here, and permits a profit which will tempt Americans to make them. The most favorable illustration is the silk industry in America. The high duty on silk goods, as an article of luxury, during the war, and the absence of duty on the material, gave a considerable margin of profit to the few silk factories then existing, and two places, South Manchester, Conn., and Paterson, N. J., have been largely built up by the increase of silk manufacture since 1861. The

industry in 1890 had 472 establishments, with \$51,-000,000 capital, employing 50,013 hands, to whom it paid \$19,680,318 wages, or \$386 each, and producing \$69,154,000 (net) worth of goods. In the fiscal year 1894-95 we imported \$31,023,138 worth of silk goods, to which was added \$14,739,550 duties (47½ per cent., the rate being 50 on silks and 45 on silk-mixtures), making the cost \$45,762,688. This shows "Protection" at its best, for American silks are honestly made, their prices have been reduced, and South Manchester is one of the most creditable American towns, where the hands are well housed, well fed, and well cared for. As silk is a luxury, no great hardship is worked by an increased price, and the Government gets revenues only exceeded by those from wool, cotton, sugar, and tobacco.

The opponents of "Protection" would point out that the industry, nevertheless, has not outgrown the need of a high duty (now 50 per cent. on silks) and of the higher prices that Americans must still pay; that the manufacturers, according to the complaint of the Women's Silk Culture Association of Philadelphia, discourage another active industry, that of silk growing, for a duty "protect-

ing" the material would reduce their profit; that the hands do not get more wages than they would in non-protected industries; and that their total wages are less than half the duty paid by the American people on foreign silks, and do not equal the increase of price paid on American silks, which goes neither to the Government nor to the wage-earner, but to the manufacturer; and that at Paterson the industry has been in great distress and many of the operatives at starvation point. An indirect bad effect is the undervaluation and the weighting with dangerous dye-stuffs of imported silks promoted by the high tariff.

In fact, Protection does not affect the wages of the laborer (except indirectly, and then often to lower them by the derangement of industry), but rather the profit of the director or entrepreneur in particular industries. To apply the doctrine to labor would be to levy head-money or prohibit immigration, and to do this would be to protect the strong against the weak, which is unnecessary. It is sometimes added to the argument for "Protection" that the result of compelling the people at large to pay higher prices and higher profits will ultimately be lower prices, as the protected industries grow into success, no longer need help, and produce cheaper. But, as a matter of fact, few if any industries seem to have been produced by "Protection;" the industries which clamored originally for five per cent. duty at last demanded fifty, and prices became cheaper only when the misdirected production broke down and resulted in bankrupt sales. The hospital patient who is given brandy to tide him over a crisis sometimes becomes a sad drunkard when he comes out.

Economists, with but few exceptions, have favored "Free-trade" and opposed "Protection" on the moral ground that the taxation of the whole community for a part is not just; on the economic ground that the restriction of the freedom of production is disastrous; and on the practical ground that the benefits claimed as off-sets to these disadvantages have not actually been produced. "Protection" is opposed to revenue, because its purpose is to prevent the importations from which revenue is to be collected. A tariff for revenue is thus the contrary of a protective tariff. Revenue begins when "Protection" stops. Recent American tariffs have been neither the one nor the other; in trying to protect everybody, as the result of

the "log-rolling" of each industry in turn, it puts a duty on the manufacturer's materials while it pretends to favor him, so that many goods that would naturally be made here are imported, and American labor is robbed of so much work, while the American manufacturers are shut out from the world's market by the high cost of materials.

Connected with the "protective" theory of foreign trade is the misleading doctrine about the "balance of trade." The balance of trade means "the difference between the value of the exports from and the imports into a country," and it is called "unfavorable" when imports of goods exceed exports. This curious superstition holds that any one country is then in a dangerous financial condition. But national prosperity is only the sum of individual prosperity (the debts or loans that are no-wealth being deducted in both cases), and a man counts himself richer when, without running into debt, he gets in more than he gives out. The difference in his favor is profit. This is just as true of nations. England's commerce is the most profitable in the world; and the "balance of trade" is always against England. The imports of Great Britain were, in 1890, over \$2,000,-

000,000; her exports over \$1,600,000,000, a balance of \$400,000,000 "against" her. This would mean an enormous profit, but for one fact too easily forgotten, that debts sooner or later have to be paid for. The men of a nation, or the nation itself, may be borrowers or lenders in other countries. The men of England have loaned a great deal of money to other nations, and a good part of her imports are the goods with which other nations are paying interest or debts. The balance of trade therefore means very little either way until we look into the actual dealings, financial as well as commercial, that make it up. The United States, for instance, which is a producer of gold and silver, naturally exports the precious metals, which would make the balance of trade seem still more "against" us. Up to 1875 our net imports of merchandise, with the exception of a few years now and then, were steadily greater than our exports, but the great harvests changed the current, and in 1885 our imports were \$620,769,652 and our exports \$784,-406,414, these figures including specie and bullion. The balance of \$163,000,000 "in our favor" went largely to pay our debt held abroad, or to pay the expenses of Americans travelling abroad, or has

come back in specie when we should have made more by importing goods which would have paid a profit. In 1887, imports and exports, including specie and bullion, balanced at \$752,000,000 each; in 1888, our imports, of \$783,295,100, including specie and bullion, were again greater than our exports, of \$742,368,690; in 1889, our imports of merchandise, \$745,131,652, were about offset by our exports, \$742,401,375; but the large exports of gold and silver, \$96,641,533, as compared with imports, \$28,963,073, made the total exports \$65,-000,000 in excess. In 1895 our imports were \$776,660,210, and our exports \$920,896,665. The actual flow of goods must not be confused with mere book-keeping of international accounts, in which the goods and bills of exchange sent each way must balance. Were all countries out of debt and prosperous, the balance of trade would be against every nation. The mistake of the balanceof-trade doctrine arose from the so-called "commercial theory" of foreign trade, which held that nations should in every possible way be embargoed from dealing with each other, whereas Economics shows that, by trading, nations as well as men gain.

XI.

THE NATURE AND USE OF MONEY.

EVERYBODY wants to "make money," and few think they need any instruction as to its "use." But in this sense the word money is used in a loose way instead of the word wealth, and a great deal of harm has come from this confusion of terms. From it, indeed, came the notion that a country grows wealthy in proportion as money is kept from going out of it, and the belief that Government can make wealth by coining money or issuing paper as a substitute for money. Money is simply that kind of wealth commonly current in exchange, and whose terms are used for valuations. It is peculiarly useful as a medium of exchange and as a measure of value, but otherwise and for itself it may be one of the least desirable forms of wealth.

Just as a boy contrives "pin-money" to help out his "swaps," so the early nations contrived money to get rid of inconveniences in direct barter. The shoemaker does not often want a hat just when the hatter wants a pair of shoes, nor can the hatter conveniently take one shoe for his hat or the shoemaker take two hats for his pair of shoes. Money, as a common medium of exchange, enables us to do away with the "double coincidence of wants and possessions," for which barter waits. We accomplish half our exchange—that is, the shoemaker sells his shoes, and holds the purchasing power in suspense—that is, the shoemaker keeps the money till he wants a hat or something else. Or, if the shoemaker sells on credit, he uses the terms of money to record the indebtedness of the buyer in his books. The use of money, instead of barter, is one of the great steps of progress: the seller can now buy when, where, and as he desires.

The first use of money, then, is as the *common medium* of exchange: any one will take it anywhere for any goods, and it enables one to buy as much or as little as he wants. It is the highway of exchange, enabling any producer to deal

with any consumer, and so fulfilling the first condition of wealth, of getting most for least labor. Second, money becomes in this way a common measure of value, or common "value-denominator" by which the values of all other things are compared. A price-current in money is understood by all, and a hundred articles are priced in a hundred items, instead of in the 4950 it would take if we priced each article in terms of every other. This furnishes a universal language of trade. Third, money is a standard of values, or measure for deferred payments. This is the use in *credit*, which is purchase in which payment is put off. The word comes from the Latin word credo, "I believe," for it is given in the belief that the debtor will pay. A promise to pay at a future time is expressed in terms of money in preference to other commodities, because people understand this term and because they look upon money as of staple value. Fourth, money becomes thus a convenient storer of values, so that men can buy when they desire, now or in the future, to best advantage. There are here two distinct kinds of use—one direct, as the common medium in actual use in exchange; the other indirect, as a common

measure, standard, and storer of values, in which not money itself but its terms are used.

These two kinds of use—the use of the thing and the use of the name, or the direct use and the representative use of money—must be kept very clearly in mind. A farmer who says to his boy, "Go to the wheat-bin and get me a bushel," may mean a bushel of wheat or a bushel-measure; it is important for the boy to find out which. The word money or the word dollar admits of this same double sense. There is the same difference between a dollar which represents cost of production, or labor-value, and a dollar which is simply a name printed on a piece of paper, that there is between a "bushel" of wheat and a "bushel" measure. The one is good in itself; the other is useless except so far as it is generally accepted to measure real products.

Different nations have used different kinds of wealth as the common medium of exchange, which was the use for which money came into being. Our word "capital" comes from the Latin caput, a head, as does the word "cattle," and, like "pecuniary," coming from the Latin pecunia, wealth, pecus, a herd, pecu, cattle, points to the early use

of cattle and sheep as money by the Greeks, Romans, and Germans. But these, though they could be driven about, could not be easily carried or divided; and wheat was also used by the old nations as soon as they became farmers as well as herdsmen, doubtless partly as "small change." Most of the barbarous nations selected that kind of wealth most current (whence our word currency), most easy to carry, and most easy to handle in small as well as large quantities. Dates were used by some African tribes, rock salt by the Abyssinians, olive oil by the Ionian islanders, tea compressed in small cakes by the Russians, tobacco by the early American planters. The fees of the clerk of the Supreme Court of the United States, in cases where the Government is a party, were long reckoned, following old Maryland customs, in pounds of tobacco, and settled according to an old legal valuation of tobacco. All these kinds of money recognize that the sound basis for money-value is wealth something which has cost proportionate labor.

In the progress of civilization it was found that the metals were the most convenient kind of wealth to use as money. Iron was used by the Spartans, lead by the early Romans and early Eng-

lish, tin by Swedes, Mexicans, and other people, copper or bronze by almost all nations. All of these, of course, cost a certain amount of labor to mine them. At last it became settled that the two "precious metals," gold and silver, were most convenient of all. A third, platinum, was used for a little time in Russia. The two precious metals meet every condition for good money: they cost such an amount of labor as to make them convenient to handle within the common range of buying and selling; they have utility as ornaments and in many industrial arts; they are thus easily transferable and universally acceptable; they are almost imperishable, not wasting greatly either by handling, or rust, or conversion into coin and back again, and their fusibility and ductility render them accurately divisible. These, with copper or an equivalent as "small change" or token currency, are the money of the trading world; and as gold possesses most of the qualities named in even greater degree than silver, there is evident a tendency towards the use of that metal as the one final standard among the most civilized nations. The nature of "paper-money," so called, or substitute-money, we have yet to consider.

XII.

GOLD AND SILVER AS STANDARD MONEY.

"AND Abraham weighed to Ephron the silver ... four hundred shekels of silver, current money with the merchant" (Genesis xxiii. 16). This first record of a business transaction shows clearly the origin of metal-money-it was so much weight of metal. "Shekel" meant "a weight" (about half an ounce Troy), just as the English "pound" was at first a pound weight of silver. The shekel, later on (Exodus xxxviii. 24), was measured "after the shekel of the sanctuary," probably a standard of weight kept in the Temple, like the standard weights now kept by each nation, by which its coinage is regulated. But the "shekel of gold" came to mean less weight than the "shekel of silver," so that a standard was kept for each-probably a result of just such changes in the value of the two kinds of money as we see in later times.

Gold and silver have been found in almost all countries, and they were early used as money. Men soon found that it was easier to count than to weigh with scales. This led to coinage, the making of pieces of metal of fixed weight and fineness, whose value is shown by the stamp. The rude Abyssinians make their rock-salt into bars a foot long and three inches square, which serve the same purpose. In the early days, when all trading was a matter of honor, sealed bags of gold-dust passed at a fixed value. When public opinion made a dishonored man a social outcast, there was little cheating. Rings and the Chinese "cash" (dating to 2500 B.C.) were early forms of metal-money. Our modern coin, the round, flat piece, stamped on both sides, is traced back to the Greek Pheidon, king in Argos, about 750 B.C. The old coins were of irregular edge, which could easily be clipped or filed; the edge is now "milled" by a machine invented in 1685, so that modern coins are protected against all loss but wear. To make this as little as possible, an "alloy" of harder metal is mixed with gold or silver-in the United States coins one-tenth copper alloy to nine-tenths fine metal, in the English coins one-twelfth-but only the

precious metal is reckoned in valuing the coin. In old times a *coigne*, or wedge, like the printer's *quoin*, was used in stamping, whence our word "coin." The Roman coins were made in the Temple of Juno *Moneta*, whence our word "mint," the factory where money is coined, as well as the word "money" itself.

Gold and silver are used as money partly because they last longer, so that each year's product adds but a small proportion to the existing stock, and vary less in value than almost any other things. Nevertheless, they have varied in value, according to supply and demand: at one period both together, when all prices, or values of other things in money, rose as they fell; in recent times silver falling greatly relatively to gold. Silver had been of equal value with gold in some barbarous countries. In Japan, when it was opened to foreigners, it took but four times the weight in silver to equal the same weight in gold; among the Greeks, before Xenophon, it took 131; later, and among the Romans, 12 times, though it is said only 9 to 7½ times the weight of silver equalled gold after the return of Julius Cæsar. During the Christian era the rate has varied in different times and in different countries at the same time, being in the early centuries about $12\frac{1}{2}$; later on as high for silver as $9\frac{3}{5}$ in England (1262) and $10\frac{1}{10}$ in Spain (1500); in 1641, about 12 in Germany, $13\frac{1}{6}$ in England, $13\frac{1}{2}$ in France; in 1724, $14\frac{1}{2}$ in France, $15\frac{1}{5}$ in England; in the present French coinage $15\frac{1}{2}$ and in the English $14\frac{1}{2}$, while the market rate for silver bullion has of recent years ruled much below $15\frac{1}{2}$, and has been as low as 32 weights of silver for the same weight in gold.

It is agreed on all sides that steady money is most important for sound business. "Monometallists" assert that only one kind of metal can properly be used as a standard, by preference gold, because silver must always have "ups and downs" in relation to gold, and first one and then the other would be used in business according to which was cheapest, if both were "standards." "Bimetallists" assert that the world needs both gold and silver for standard money, and say that if civilized countries would unite in coining silver at a fixed legal rate of 15½ or 16 to 1 gold, there would be no serious derangement. Most economists favor the single gold standard. The question has been made a political one, and two international con-

ferences have been held without reaching result. Great Britain and its Australian and American colonies, Germany, Scandinavia, and Chili, are the chief gold standard countries, using silver as "legal tender" only for small sums; Russia, India, China and Japan, Mexico and Central America, use a single standard of silver. The double standard is maintained by France, Italy, Belgium, Switzerland, and Greece, which are bound into the "Latin Union," by Spain, and by the United States. Silver, which up to the fourteenth century was chiefly used for coinage, seems to remain the money of the less civilized countries; the general tendency seems to be in favor of a single standard, and that gold.

But the two metals, used as money, have also had their "ups and downs" together. There was in circulation in the Roman empire in the time of Christ (so Mr. Jacobs estimates) about \$1,790,000,000 gold and silver. With the decline of the empire and the invasion of the Goths mining practically stopped, and the loss and wear of coined money reduced the stock in Europe by the year 800 to less than \$168,000,000, a point at which it was kept, by the revival of mining, until

the discovery of America in 1492. Meanwhile money had greatly risen in value; it required only £3 10s. weekly (\$17.50) for the subsistence of King Henry VI. and ten retainers while prisoners (1470) of Edward IV. The discovery of America began a new chapter in the history of money; after the opening of the great silver mines of Potosi in 1545, and the invention by a Mexican miner of the process of amalgamating silver with mercury, over \$10,000,000 yearly was sent to Europe. Money fell rapidly; the price of corn rose in England from 2s. to 6s. and 8s. per quarter; prices generally rose fourfold; debts were made almost nothing; and to the ensuing derangement and distress historians trace the beginning of English pauperism, and those money troubles of Charles I. which led to the great rebellion.

About 1809 Europe had \$1,900,000,000 metalmoney in circulation, but the Spanish-American revolutions reduced the silver supply, and the product of the Ural gold-mines, opened in 1823, did not make good the loss, so that in 1829 the stock was down to \$1,566,000,000. The discoveries of gold in California (1848) and Australia (1851) again changed the face of things. The annual yield

of gold and silver, over two thirds gold, while before it had been two thirds silver, rose to \$100,-000,000 and over. It is estimated that the commercial countries had in 1895 \$8,000,000,000 coin and bullion, about half gold, of which the United States had \$636,000,000 gold and \$624,-000,000 silver; France, \$850,000,000 gold and \$487,000,000 silver; Great Britain, \$580,000,000 gold and \$115,000,000 silver; and Germany, \$625,-000,000 gold and \$215,000,000 silver. The opening of the Nevada and Colorado mines has increased the relative production of silver; out of the world's product (1895) of \$203,000,000 gold and \$226,000,000 silver (U.S. coinage value), the United States supplied \$46,000,000 gold and \$72,-000,000 silver, or one third. Silver in the London market has fallen as low as 32 to 1. But the great increase in money seems to have been offset by the increased productive activity brought about by machinery and by other causes.

Variations in prices from period to period have led economists, and particularly Professor Jevons, to urge the use of a "tabular or multiple standard of value" for deferred payments, made by averaging the prices of articles of common use.

XIII.

UNITED STATES MONEY.

DURING our war, when metal-money, and particularly "change," was very scarce—so that we used postage-stamps and afterwards "postal currency," representing five or ten or twenty-five or fifty cents' worth of postage-stamps—a good many shopkeepers issued copper tokens "good for one cent," which passed current as money. Many of them were not good for a cent, and were never redeemed by the issuers. Probably in the early days of coinage, private people thus made coins. But now only nations do so, for "the public faith" is the best surety that coins contain so much metal of such a fineness, or will be good for the money's worth, and coinage is, as Jefferson said, "peculiarly an attribute of sovereignty." Counterfeiting was once punished in England as treason, by death; it is punishable in this country, in the case of

United States notes, by fifteen years imprisonment. It is recognized as one of the most serious crimes against property, because it undermines the very foundation of sound business, honesty in weights and measures. Even were good metal used, coining by individuals is by law a misdemeanor.

The Constitution gives to Congress the power "to coin money, regulate the value thereof and of foreign coin, and fix the standard of weights and measures," and denies to the States power to "coin money; emit bills of credit; make anything but gold and silver coin a tender in payment of debts." A clause giving Congress the power to "emit bills on the credit of the United States" was struck out in the debates, to avoid, as was said in the debates, even a "pretext for a paper currency, and particularly for making the bills a tender either for public or private debts." The Continental Congress in 1785 unanimously adopted as the money unit the "dollar," the name coming through the Spanish "dollar" from the German "thaler, or "Joachimsthaler," the Joachim thal or dale being the seat of great silver-mines where ouncepieces were coined. The law establishing the mint, 1792, provided for a silver-dollar unit of 416 grains,

3714 grains of it fine metal, and a gold "eagle" or ten-dollar piece of 270 grains, 2471 grains fine ("the proportionate value of gold and silver" being defined "as 15 to 1, according to quantity in weight"), besides other gold, silver, and copper coins. In 1834 and 1837, changes were made, the later law providing for coin $\frac{9}{10}$ fine, the silver dollar weighing 412½ grains and the gold eagle 258 grains. The present coins are: of gold, the doubleeagle (\$20), eagle (\$10), half-eagle (\$5), and quartereagle (\$2\frac{1}{2}), the gold dollar (not coined since 1800) being the money unit with a standard weight of 25.8 grains; of silver, the dollar, half-dollar, quarter-dollar, and dime; of base metal, the five and one cent pieces. The law of 1853 provided that halfdollars and other subsidiary silver coins should contain but 384 grains gross weight to the dollar, and made a seigniorage charge of one half of one per cent.—afterwards reduced. From 1873 to 1878 the silver "trade-dollar" of 420 grains (378 fine metal) was struck, chiefly for foreign trading. It was a legal-tender, by an oversight in the law, up to five dollars, till 1876, when its legal-tender character was repealed. In 1883 Government declined to receive it at full value, people began to realize that

it did not contain a dollar's worth of silver, and it fell to about 85 cents. In 1873 the gold dollar of 25.8 grains gross weight was made "the unit of value." In 1878 Congress passed over the veto of President Hayes the Bland-Allison Act, providing for a "standard silver dollar" of 4121 grains as an unlimited "legal tender," and the coinage of \$2,000,000 to \$4,000,000 of these per month, and in 1887 these were made exchangeable for the "trade dollar." The "Sherman Act" of 1890 provided for the purchase at market price of 4,500,000 ounces of silver each month, of which 2,000,000 ounces, or enough to provide for the redemption of "silver certificates," should be coined monthly, the profit or seigniorage going into the Treasury. This act was repealed in 1893, to stem the panic of that year.

This panic was caused by the fear that the silver dollar, worth as metal only 51 cents, might become the money of account. People drew gold from the Treasury by presenting paper currency until the Sub-Treasury at New York was "within twenty-four hours" of suspending gold payments. The President averted disaster by using his power to sell bonds for gold.

The Government declares what money shall be "legal-tender" among its citizens, that is, what kind of money when tendered by a debtor shall make a legal offer to discharge a debt. If you offer to pay rent in any other kind of money than legal-tender, the landlord can refuse to accept it, and can get a court to put you out as though you had refused to pay. The gold coins of the United States and the "standard silver dollar" are legaltender for all sums; the small silver for sums not exceeding ten dollars; and the nickels or the old copper cents for sums not exceeding twenty-five cents in any one payment. The small silver and nickels, issued for "change," make no pretence to full value, and are a "token money," to be redeemed by the Government. They are purposely under-weighted, so that they shall not be melted down or carried out of the country.

The word legal-tender is commonly used to signify the "United States notes" or "green-backs," issued under the acts of February 25, 1862, and March 3, 1863, which say on the back: "This note is a legal-tender at its face value for all debts, public and private, except duties on imports and interest on the public debt," both of

which are payable in metal-money. The law signed by President Lincoln, February 25, 1862, was the first making anything but gold and silver coin a legal discharge of debts, although the Continental Congress, January 4, 1777, passed a resolution asking the States to declare its bills-of-credit legal-tender, which was done by eight States. The law of 1862 was passed as a "war measure," and included "all debts within the United States." In December, 1869, the United States Supreme Court declared that the legal-tender clause was "unnecessary and improper," that its application to pre-existing debts impaired the obligation of contracts, and that the law was therefore unconstitutional. In 1870 two vacancies on the bench were filled by President Grant; on a new case a rehearing was had, and in January, 1872, the decision was overruled, and it was held that "Congress has power to enact that the Government's promises to pay money shall be, for the time being, equivalent in value to the representation of value determined by the coinage acts." "There are times," added Justice Bradley, "when the exigencies of the State rightly absorb all subordinate considerations." This decision justified the issue of legal-tenders as a war measure; but a third decision, in March,

1884, went further, and declared, only one judge dissenting, that Congress has full power at any time to authorize the issue of legal-tender notes, on the ground that this is an attribute of sovereignty not reserved or denied by the Constitution. The decision is regarded by most economists as dangerous, and it is believed that even the war could have been carried on at less final cost if other financial measures had been used.

Of course, in making metal-money it costs something to test the metal and stamp it into coins. This cost may be paid for as a general expense of Government out of taxes, and the full weight, or face-value, of metal put into the coin. This is "gratuitous coinage," and is the English practice. Some economists object that it leads jewellers to melt up new coins instead of assaying for themselves, and makes the Government pay for a "perpetual motion" of coinage. Or, this cost may be paid by deducting enough metal before making the coin. This deduction is "seigniorage," the pay of the seignior or sovereign. Up to 1853 the United States had gratuitous coinage, but in that year a seigniorage of one-half of one per cent. was established for gold coins and silver dollars, reduced in 1873 to one-fifth. Since 1875, gold coinage has been gratuitous. Both England and the United States now have "free coinage" for gold; that is, any citizen can have gold bullion (uncoined metal) made into coin by the mint on the same terms as the Government. The coinage of standard silver dollars is now determined in the United States by the redemption of "silver certificates," and is practically discontinued because of the great number in the Treasury vaults. The amount of "change" coined depends upon the public need, as determined here by the Treasury, in England by the Bank of England.

The trouble with seigniorage is, that it makes it easier for a government to debase its own coins, either by putting in less metal or by mixing in a cheaper metal. Up to 1300 (Edward I.) a "pound" really meant a pound's weight of silver, and a shilling a twentieth of that. But the coinage was again and again reduced in weight, so that for generations, it is now supposed, the English people actually weighed out their coins in settling payments. The steadiness of prices in face of a known debasement of coinage cannot otherwise be explained. Sixty-six shillings now make up a pound of silver, so that the pound sterling is but three-tenths of a pound's weight of silver. Sev-

eral English monarchs, notably Henry VIII., also debased their coinage secretly by alloy. One of the Spanish gold coins, a maravedi, was debased in quality till it became only copper. People, however, may go on taking this debased money and calling it by the old name for a long time, and one of the great economists, Ricardo, sets it down as a law of seigniorage that a debasement of coins does not of itself produce depreciation of currency, so long as no more is issued than the people really need in their exchanges. This is true so long as people are willing to take the poor money as good, either because they cannot get better, or because they do not know better, or because of habit, or because the law tells them to. But when they begin to get afraid of the debased money, and prices start up, so that a dollar in wages does not buy in the cheap money what it did, and they take to barter, or modify or limit their production, then come "bad times." The people who earn wages, and the small shopkeepers, feel the effect worst. This happened in 1883, when our "trade-dollar" stopped circulating; the poor people and country stores could buy only 85 cents' worth with the dollar they had taken for a hundred cents.

XIV.

PAPER AS MONEY.

EVEN the precious metals weigh a good deal, and, in large amounts, are inconvenient to carry or to keep. If, therefore, a government, or a bank. or a trustworthy person, will keep the coin for the owner, and give him paper certificates that it is held by them, he likes these better, though they are only pieces of paper, worth nothing in themselves. They are like the title-deeds of a house. The "gold certificates" and "silver certificates" of the United States are of this sort. Such paper is "representative money" in the strictest sense, since each "dollar" represents an actual dollar in metal-money, and it is "convertible" at any moment into metal-money. The metal remains unused, while the paper passes current from hand to hand in its place, as currency.

Now, a banker finds that this unused money is

not called for by its real owners all at the same time. If they permit him to use or loan part of the metal, he can make a profit for them or for himself or for both by getting interest for it, keeping enough "reserve" of metal to pay the demands presented each day. The Bank of Sweden, founded in 1657, early issued "bank money," or notes undertaking to pay to the bearer at sight a certain amount of metal-money. So long as such money can actually be had on demand for the paper, this kind of paper currency is also "convertible."

If, however, the bank managers make a mistake, and do not keep enough reserve, the holders of notes may become frightened and make a "run" on the bank to get their part of the metal out before other depositors use up the supply. The bank may then have to "suspend payment" until it can "realize" on the securities it has taken for loans, that is, get real money for them. If enough people are scared to make a general "panic," it will be very hard to get the real money even by selling the securities at a loss. Thus notes which were called "convertible" become "inconvertible," because you cannot on demand convert them into the metal-money for which they are

supposed to stand. Their power-in-exchange, or value, will be no longer "as good as gold," but will depend on the *confidence* people have in the ability of the issuer to pay by-and-by.

During the war our Government, not having enough money for its needs, said to the soldiers and the shopkeepers: "We cannot pay you money now, but we will some time: meanwhile these pieces of paper are evidences of debt, which other citizens must accept from you as money." These were the "legal-tenders," a paper currency inconvertible at the time of its issue, but which became convertible when the United States "resumed" specie payment, January 1, 1879. It was a mortgage on the earnings of the people, to be collected by future taxes. Other governments, when hard up, have done the same thing, but usually their currency has not been made good. The assignats of the French revolution assigned to the holders the lands seized by the State, but few holders got the lands or saw their money again; our Continental currency in like manner became worth nothing. Inconvertible currency of this sort is not representative of wealth, but evidence of debt: it is promises-to-pay, or credit-money. A government may use its authority to force a loan and give such currency compulsory circulation, but its power-in-exchange, like that of inconvertible bank money, depends at once on the confidence in its being made good. In the dark days of the war greenback dollars bought less than forty cents gold would buy; and when the Government tried to prevent their further fall by prohibiting dealings in gold, people only lost confidence all the more, and greenbacks bought still less.

The economist Ricardo points out that government inconvertible currency is like a coinage debased its entire value, for the cost of printing is almost nothing. According to his "law of seigniorage," such a debased currency does not necessarily depreciate, or buy less than its face-value, if no more of it is put in circulation than the public needs. But usually people become afraid that it is not worth its face-value; it falls—i.e., buys less; more is needed to make the same amount of purchases; and thus depreciation, inflation of prices, speculation, and all their train of ills set in. There have been very few cases where an inconvertible currency has kept at par (of equal value) with gold. The Bank of England notes from 1797 to 1808 (after which date they fell), and those of the Bank of France in 1848 and after 1871, are almost the only instances.

We cannot, in short, speak of "paper-money" as though it were all of one kind or one quality all good or all bad. We must discriminate, as we would between a 2.40 trotter and a tread-mill sackof-bones, though each is called a horse. Economists dispute fiercely as to whether paper can or cannot be "money," but this is really a quarrel about words. "Money is that money does," says one economist. Some use the word "money" to cover any substitute, others only for the metal or other value-money itself. The last is the original meaning and does not mislead, and paper is more accurately called substitute-money or currency. As a common medium of exchange, paper is more convenient than metal; it costs less to print it than to make coins. If paper is worn, or lost, or destroyed, in transit, no wealth is lost; without it the great volume of modern trade could scarcely have developed, and the lack of circulating medium would have greatly disturbed prices. It has accordingly been used for many centuries; Marco Polo found a paper currency of mulberry-bark

in China before 1300. Adam Smith likens it to a highway in the air, leaving the old roads for crops. But as a common measure of value, it really depends on its own relations to metal-money, and as a standard of deferred payments and a storer of values it may prove ruinously treacherous. When "greenbacks" fell to 40 per cent., all who owed debts gained, though only till they had to borrow again; when they rose, all who owed lost-in neither case by their own doings. An inconvertible paper currency is usually costly in the long run. We honor the "blood-stained greenback" for its help in the war; but if our financiers could have avoided paper currency—as Napoleon, after the paper collapse of France, did throughout his great wars—we might have been saved the enormous loss of paying out at forty cents and redeeming at a hundred. Steadfastness is the great safeguard of sober industry, and paper currency has been called "the alcohol of commerce" and "mock money." "In the land of Mendacity," says an Italian writer, "they use only paper-money."

Paper currency lacks also the final quality of real money—universality—for it is "good" only within the bounds of the credit of the country which issues it. Metal-money helps trade to regulate itself. If sugar is cheap in the West Indies, *i.e.*, money dear, or if a great wheat crop has brought us an excess of metal (which the United States produces and usually exports), *i.e.*, money is cheap, money flows from us to the West Indies and we get our sugar cheap. But if we have a debased money, the natural course of trade is checked and we lose the profit.

Also, when full-value and debased currency are circulating together with the same purchasing power, "bad money," as stated by what is called Gresham's law, "always drives out good money," which people hoard or send away where they cannot use the bad money. When bad money thus checks exchange with other countries, it acts at home to check production, raise prices, produce inflation, and wreak ruin. It shuts out a country from the benefit of the world's trade, and makes buyers fewer. Thus "cheap money" is dear in the end.

There could not be a greater misfortune to every honest worker—farmer, shopkeeper, or mechanic—in the United States, than the issue of so-called "fiat money" (Latin, fiat, let it be created)

as a means of creating wealth. You cannot make nothing good for something by printing on paper "good for one dollar, on the credit of the United States," without the intention of ever paying the dollar. This would not be credit money, because credit means belief in final payment. It would have no "labor-value," nor any value, because it would neither cost labor, nor represent labor stored as wealth, nor be a promise to pay labor. The Government could circulate it only by paying it out for work, or for existing debts, or by loaning it, or by giving it away. If it were given away, either everybody could get it alike, so that no one would need to sell real things for it, or a few in the ring would get it at the expense of the many. If it were loaned, the borrowers would some day have to pay back, probably with a more costly currency after the "fiat money" had disappeared from sight, so that a mortgage would eat up the farm or the house. If it were paid out for work, that is, in wages, a laborer getting three "dollars" a day in place of one would be no better off, because the farmer would require three dollars instead of one for the wheat which cost him a day's work. Prices would rise, but a day's

work would not buy more. Dishonest men who owed debts would gain by forcing such a legaltender on the people they owed; but new dealings would be on special contracts to pay in real money, as in the time when greenbacks were lowest, for no law can make a man sell what he prefers to keep. As times grew harder, "more money" would be the cry, as the drunkard cries for more rum, and the currency would be worth less and less. When the sham came to its end, the worthless paper would be not in the bank and the merchant's safe, but in the pocket of the worker and the till of the small shopkeeper. This happened in the case of the silver trade-dollar also, and a like thing would happen if the under-weight silver dollar drove out gold. All this is true as to all "cheap money," that is, money in which the coins have not full value or full weight in fine metal. "Repudiation" is the most foolish crime of states, for it prevents all credit: "fiat money" is a repudiation in advance. "A disordered currency," said Daniel Webster, is "the most effectual of inventions to fertilize the rich man's fields by the sweat of the poor man's brow."

XV.

BANKS AND BANKING.

THE little rills up on the hill-sides do not count for much, but when they fill the mill-pond the farmer can grind his grist and the woodman can saw his logs by their help. A bank is just such a reservoir of money stored for use. The depositors add their dollars to the capital of the stockholders, and this money is then let out when and where it is needed for business. These loans are often made to governments, either directly or by buying Government issues. This was, in fact, the purpose of the first public banks, started in Italy probably before 1200. The Greeks had their trapezites or bankers, so called from the table (trapeza) on which they counted out the money; and when banking was revived by the Jewish money-lenders of Italy in the Middle Ages, each had his banca, or bench, which was broken (rotta or rupta) when he

failed to pay as he promised, so he was said to become bankrupt.

Besides loaning to governments or to corporations—that is, buying their "bonds" or "securities"—banks loan their money to private persons, such as merchants, whose promises-to-pay are called notes-of-hand or mercantile paper. The use of money is paid for by adding an extra sum called interest at the end of the time, say \$106 for \$100 at the end of a year, or by deducting a like sum as discount, the borrower receiving but \$94 instead of the \$100 he promises to pay a year hence. If money is scarce or times risky, or the man doubtful, so that his *credit* (the belief in him) is poor, he will have to pay greater interest or discount; if the money market is "easy," less. The bank may trust him simply on his note, or he may give it collateral—that is, securities along-side with his own promise. This loaning is the first way in which a bank does service and makes profit.

A bank usually permits its depositors to draw on it orders to pay money, called *checks*, a word which comes from *Exchequer*, the name given to the British Treasury because it formerly used a checkered table like a chess-board for convenience in counting. This enables men to pay debts without carrying about money. The great "clearinghouses" in New York and London do this service for the banks themselves, clearing up at the close of each day transactions of millions by receiving orders on banks which owe from banks which are owed, and transferring any small balance from a debtor bank to a creditor bank. This cancelling of indebtedness is a second service of banking.

A bank also, by the help of banks in other places, collects distant debts. A creditor—that is, some one to whom money is owed—"draws" upon the debtor who owes him; the draft, or order-topay, is sent by a bank in New York to its correspondent bank in Chicago, which sends out a runner to collect it from the Chicago debtor. Or it may be the debtor's own note which is sent on for collection. If he does not pay, the bank protests, and returns the draft or note with an affidavit called a protest. When drafts are drawn upon people in other countries they are called "foreign exchange." The bank sells to a man in New York the right to receive or transfer in London, for instance, money due by some other Englishman to some other American. This saves the risk and

cost of sending specie, *i.e.*, gold or silver money or bullion; and the charge for this service—that is, the rate of exchange—varies, within the limits of the cost of shipping specie as freight, according to whether more or less money is due in London than there are debts to be paid there. It costs a little over half a cent to get a gold dollar safely to London; the value of the English pound, in which London settlements are made, is reckoned by our mint at \$4.86 $\frac{65}{100}$; the rate-of-exchange brings a bill-of-exchange perhaps to \$4.90, above which point it pays better to ship gold. This collection of debts is a third service of banking.

A bank dealing in money knows how much foreign or debased coins are really worth, and buys them for that much current money. Where there is mixed money this is very important: it was the origin of the great Bank of Amsterdam and of much of the mediæval Jewish banking. This is a fourth service.

A bank is also a place of safe deposit for valuables, and English banking grew out of the business of the goldsmiths, who took valuables for safe-keeping, and got in the habit of advancing money on them. Many of the Crusaders thus

borrowed money of the Jews. This is a fifth service of banking, though now "safe deposit companies" have taken much of this business.

Here, then, are five kinds of service which a bank performs, and for which it rightly earns money, without touching what most people think is the chief work of a bank, the issue of paper-money. The earliest "bank of issue" was probably that of Sweden, founded in 1657. Like each of the other five named, this service may or may not be a feature of a true bank: the "issue department" and the "banking department" of the great Bank of England are virtually two separate banks, doing different things. The issue of paper-money, if wisely done, is a sixth service, but it includes the greatest danger of the banking business. In England only the Bank of England, which is the financial representative of the Government, can issue banknotes, and, above £15,750,000 represented by securities (of which the £11,000,000 owed by the Government to the bank is the greater part), it must keep a pound in gold in its vaults for each pound-note issued. This is the result of Sir Robert Peel's famous Bank Act of 1844, in which the advocates of the "banking principle" upheld by Thomas Tooke, who argued that so long as you can actually get gold for your bank-note there is no need of limiting issues by law, were defeated by those who held to the "currency principle," led by Lord Overstone, who argued that without such limitation currency is almost sure to be overissued and so inflate prices by its depreciation. Our "National currency," issued by the National Banks, is protected by a deposit with the United States Treasury of Government bonds, against which only ninety per cent. of their face-value can be issued in currency, and by the Government guarantee of receiving it for all dues except interest on the public debt. These banks also keep a gold reserve, usually about 12 per cent. of their notes.

The one purpose of all these branches of the banking business is to make the most of the existing stock of capital. Safely done, this helps everybody. Careless banking, on the contrary, cripples all business. The need of banks wherever people do business is shown by the fact that when a little place starts up in the West, the keeper of the country store becomes virtually banker for the place until a public bank is started. The "wild-cat" banks before the war at the West, nevertheless, did a great deal of harm: they issued

great quantities of paper-money, kept as little as two per cent. of specie, and failed to pay their notes. The country was cursed with paper-money. much counterfeited, from hundreds of banks of all shades of credit, which no one would take until he could look up the facts in the Bank-note Detector, issued monthly in those days. This system of banks chartered by the States was largely superseded, early in the war, by the system of National Banks, under acts of February 25, 1863, and June 3, 1864. The greatest amount of notes authorized was \$354,000,000, which was never quite reached. These notes were covered by the deposit of United States bonds, and gave a safe and convenient currency, similar to the "greenbacks." The profit of interest and on lost notes, as in the case of State-bank notes, is made by the banks, and not, as in the case of "greenbacks," by the Government; but this is perhaps compensated for by the service done by the banks, and the regulation of the currency by the needs of business instead of by arbitrary law. The present problem of banking is what securities can be used as a basis of Nationalbank notes, as the Government pays its debt and withdraws its bonds.

In 1895 there were 3712 National Banks, with \$657,000,000 capital, \$1,715,000,000 deposits, and \$182,000,000 circulation; there were also reported 1017 savings-banks, with \$1,844,500,000 deposits; and 5086 State and private banks and trust companies, with \$392,500,000 capital, and \$1,340,800,000 deposits—these being but partial returns; so that we have over 9800 banks, with probably \$1,050,000,000 capital, and nearly \$5,000,000,000 deposits.

Savings-banks are confined usually to receiving deposits in small sums, and pay the depositors, in interest and dividends, the whole profit from the loaning of this money. They are governed by trustees representing the depositors, only a few having separate capital and stockholders, and they are restricted by law from loaning except on specified security. In England the Post-office Department is a great savings-bank, receiving savings in postage-stamps or money at each post-office, and loaning the total to Government by investing it in Government bonds.

Banks, we have seen, are really stores which deal in money, collecting it and letting it out much as a grocer buys and sells groceries. They give credit for money just as a grocer would give credit for

goods. But because money is the general medium of exchange, and banks are usually public institutions, the bank reports, showing the "reserve" held by them, show the commercial condition of the community much as a steam-gauge shows the pressure in a steam-engine. When money is "scarce" and much wanted, or when times are risky, bankers charge a greater rate of interest or discount; and as London is the great banking centre, the rate made from week to week by the governors of the Bank of England, usually varying between 3 and 4 per cent., is an indication of the state of trade in the whole world. Bankers need to be very wise in these matters, else the community may be tempted into over-speculation by too free loans or frightened into panics by over-caution. Thus the usefulness of any bank, and of the whole banking system, depends upon the honesty and good judgment of the men conducting it. No law can prevent foolish people from putting money into swindles which call themselves "banks" or "bankers," and such people must pay the penalty in loss. But a system of sound branch banks throughout the country, like that in Scotland, is a great boon to a people.

XVI.

LAND AND ITS FEATURES.

WHEN a farmer gets what he calls a fair price for a bushel of potatoes, say 40 cents, he finds, when he thinks it out, that he has paid or has to pay say 5 cents for the use of the land on which the crop was grown; 15 cents for seed, fertilizers, and replacing his tools; 15 cents for labor in planting, hoeing, and digging; and has left 5 cents "profit," which is his own pay for his skill in managing the crop and taking the risks of it. Or a cotton-mill corporation which gets 7 cents a yard for its sheetings finds that the use of land and water-power has cost it \(\frac{1}{4} \) cent a yard; the use of its mill and machinery and the cotton it uses, all of which are expenditures of capital, 5 cents; wages, 11 cents; leaving for cost of administration and net profits 5 of a cent.

"Unto each, its own." By means of Exchange, with money for its chief instrument, the result of

Production becomes the subject of Distribution, and each factor which contributes to the product is entitled to its share when that product, or its returns in money, is distributed. Having now learned the meaning of value and price, the nature of money, and the functions of banking, we come to the consideration of the several factors in Production and their payment in the Distribution of product. The principal factors are Land, Capital, Labor, Brains, contributed by the Land-owner, the Capitalist, or wealth-owner, the Laborer, or hand-worker, the Director of production, or brain-worker, who are paid by Rent, Interest, Wages, Profits. Any or all of these may be combined: a farmer who owns his farm, who does not have to borrow capital for seed and tools, and who does his own work, does not have to pay out to anybody else any part of his 40 cents, except for taxes and insurance; but all the same the crop must pay him rent, interest, wages, as well as profits, or his farming "does not pay." Taxes, insurance, and the like, we shall see later on, are an indirect payment for the factors in production above noted.

The one great exception to the general truth

that all wealth comes from work is LAND, the use of which is paid for by Rent—that is, the amount rendered by the user to the owner. For capital is but stored labor, and the Director also labors. though with his brains instead of his hands. Land is the contribution of nature, valuable in exchange because it is limited in quantity and various in quality. Air every man may have, and it is all alike; therefore no man buys it. This is not so with land, which, in the economic sense, includes all property connected with the earth, as waterpower, or shooting rights, or shore rights, or the right to fish in privately owned waters; in brief, anything that is "rented," not of human origin. It is usual to speak of the rent of a house or a factory, but economists confine the word to that part of the payment which is for the land itself, the building being really a form of capital, paid for by interest. Rental is perhaps a better word for rent and the payment for the use of buildings. Land and the fixtures upon it are often spoken of as realty or real property, to distinguish them from personalty or movable property. Land is the primal source of all product extracted by labor it is the mother of wealth.

When men "possessed the earth," and "the land was all before them where to choose," they found that there was in fact a choice, for some land was better for their purpose than other land. The wandering tribes of herdsmen sought the best pasturage, and sometimes fought for its possession. As men became civilized and tillers of the soil, they settled, whether in ancient India or in ancient Germany, in village communities. Each community owned its tract of land, marked off into three marks—the common or untilled land. the village mark where each family had its house, and the arable mark, usually divided into three great strips or fields (one for a heavy crop, one for a light crop, one lying fallow, in rotation). Of these three fields each family had a portion, which seems to have been redistributed at intervals of years. The community was the general owner, but it allotted particular pieces to particular families for their houses permanently, it seems, for their tillage subject to change. The Hebrew provision (Leviticus xxv. 8) that all village land should be returned to its original owners in the fiftieth year of jubilee, but that city house-land could be permanently sold, shows traces of the same system, but it does not seem to have lasted many generations beyond the conquest of Canaan. Under the feudal system, which fixed men on the soil, the occupier of land paid a tax or license or military service to the feudal owner, and competitive rent, depending on the productiveness of land, did not yet exist.

Later on, as civilization progressed, land came more definitely into individual ownership, and men sold their holdings or let them for rent. But the community, or, as chieftainship developed, the lord of the manor, always held a superior ownership, which has come down to our day in the doctrine of "eminent domain." In Great Britain the Queen, in this republic the sovereign people, is supposed to own *all* the soil, private lands as well as public lands; and it is by virtue of this that the State takes or grants to railroads the right of way through private lands, on payment of compensation fixed by a court, even though the owner does not want to sell.

The law and custom as to the descent of land have great influence on the economic condition of a country. In France the Code Napoleon, requiring the division of all landed property (except the equivalent of one child's share) equally among the children, is said to have "changed the face of the landscape:" it certainly promoted the tendency to small holdings, which has given France 5,500,000 farms, 5,000,000 of them under one hectare (six acres) each. Entail—the right to fix the ownership of lands through successive generations—is now abolished in most civilized countries, but the practice of primogeniture, or descent by oldest son when no will is left, and the great legal costs in conveying land, have combined to keep the land of Great Britain and Ireland in few hands. Out of 72,000,000 acres, not common or waste lands, with a rental valuation of \$650,000,000, one half (40,000,000 acres) is owned by 2238 people; 41 have holdings of over 100,000 acres each, aggregating 0,000,000 acres, 10,888 holdings of over 10,000 acres, and 314,703 include all of one or more acres. In this country land is plenty and transfer is easy, and most of the States prohibit devises beyond 21 years from the death of heirs living, and divide intestate (unwilled) property equally among children. The United States, accordingly, had, in 1890, 4,564,641 farms, comprising 623,218,-619 acres and averaging 137 acres each, of which

1,318,521 are under 50 acres and 31,546 over 1000 acres. The individual ownership of land, and its division into many holdings not too small to pay, has usually been found to be the most productive system, though the introduction of machinery on a huge scale on the great farming plains of the West is producing new results.

Land is not only limited in quantity, but it is limited also in quality or power of production. Its natural productiveness may be raised by careful tillage and use of fertilizers, so that an acre which would naturally produce only 8 bushels of potatoes may produce 12. But a point is presently reached where it costs more labor to raise the extra bushel of potatoes than the bushel is worth; at this point, if ten men have been working on a potato-field, the labor of an eleventh man will not get one-tenth more, and so each worker averages less. This principle is known as "the law of diminishing returns." It holds also in machinery to some extent, for it costs more coal to get the twentieth knot of speed out of a fast steamship than for any two or three knots at less speed, but in manufacture more machines can commonly be made until there are enough to produce all that is

wanted. But land cannot be increased in quantity, and the law of diminishing returns is a peculiar difficulty. It led to the doctrine of Malthusianism, named from the English economist Malthus, which points out that population tends to increase geometrically, doubling every twenty-five years, and food only arithmetically, so that the race faces starvation, unless population is checked. But, as a matter of fact, the increase of food product has outrun the increase of population, and each generation since Malthus's day has had more to eat than that before it. And it is now claimed that by treating the soil as a laboratory instead of as a farm, and obtaining the free nitrogen of the air by means of plants such as Indian-corn, we can increase the supply of food almost indefinitely.

Thus far, better farming has increased remarkably the agricultural product per acre. England, in the fourteenth century, used nearly all its arable land to support 2,500,000 people, an acre producing only 8 bushels of wheat from 2 bushels of seed; in the eighteenth, 7,500,000 were supported more comfortably, the product being 20 bushels; less land is now cultivated, but the product is nearly 30 bushels. France, in the seventeenth

and eighteenth centuries, with a population rising from 12,000,000 to 19,000,000, obtained only 9 bushels to the acre, and every third year went hungry; her product, with double the population, is now $15\frac{1}{2}$ bushels, which, with her imports, enables each person to consume more than 21 instead of less than 14 bushels per year.

While the original value of land is a boon of nature, a piece of land acquires an added value in two ways; first, through its direct improvement by cultivation, so that it becomes in this sense "a manufactured tool" improved in use—"the great savings-bank" through which each generation bequeaths a large part of its gains to the next; secondly, through its indirect advance with the progress of society and the new demands as "the country grows up to it." The thin, warm soils near watercourses—first cultivated, as Henry C. Carey points out, by new settlers, because more accessible—are made more and more productive by the use of fertilizers; the richer soil of swamps or forests must be drained or cleared by the labor of men; in our Western States many lands depend on artificial irrigation for almost their whole productive capacity. All these are examples of

direct improvement by the individual cultivator. Where a man owns his farm, this work is so much capital put into his land instead of into the savings-bank. It may thus be said that the final value of a piece of land on which rent is to be paid is made up of three elements, contributed by (I) nature, (2) society, (3) the individual improver.

The increase in the value of a piece of land caused by "society," usually called the "unearned increment" because it is not earned by the holder of the land, comes partly from the increased demand for product as a community develops, partly from the safety in producing which grows with law and order under good government, but chiefly, in the case of agricultural lands, by the ease of access which, in bringing a market near to a piece of land by means of good roads and of railways, practically brings the land to the market, and increases the return by decreasing the cost of transportation. In the case of the small pieces of land productive for manufacturing purposes, and in the smaller pieces productive as stores and shops for business purposes, the value added by society becomes greater and greater. When we come to city lands used for residences, not business pur-

poses, the natural element of value sinks almost out of sight, productiveness is not considered, and accessibility and fashion, purely social or mental elements, are the chief elements of value. The city of Chicago, where 500 acres were offered in 1841 for \$5300, has now a land valuation of over \$50,000,000, mostly from "unearned increment." Land in the heart of London is said to have increased a thousandfold in value in 150 years. The amount of land withdrawn from production for residence use is not, in this country, very large; the 11,483,318 dwelling - houses (housing 51 persons each, being 12,600,152 families averaging 5 persons each) and other buildings in the United States would occupy about 600 square miles, or half the State of Rhode Island, and the auxiliary ground would probably take but a fraction of Connecticut.

It has been pointed out by Adam Smith and other economists that the general price of land is low when interest is high, that is, when capital is scarce. The reason is that productive land can be fully developed only by the help of capital; and when capital is not easily to be had, either because manufacture is diverting it from agricult-

ure, or for other reasons, the land cannot be worked to full advantage and has for the time less value.

The census estimate (1890) of the total property in the United States (\$65,037,000,000) assigns \$13,279,000,000 to farms, of which four fifths is supposed to be land-value; \$26,265,000,000 to business, residence, and other real estate, of which one-half to two-thirds is land-value; besides \$8,685,000,000 to railroads and equipment, and \$1,291,000,000 to mines and quarries. The value of the land, as improved, would be thus near \$30,000,000,000,000, or nearly a half of our total property. It is asserted by investigators of the subject that "universally the market value of the aggregate of land and that of the aggregate of productive capital are equal."

The total area of the United States, omitting Alaska, is 2,970,000 square miles, with an average of 21\frac{1}{3} persons to the square mile. Of this about one half, 1,500,000, is considered arable land; 973,700 is already occupied as farms (558,700 improved and 415,000 as yet unimproved). Alaska, with its 531,409 square miles, brings the total area to 3,500,000 square miles. Of this, the United

States has held, unallotted, as public lands, 2,890,000 square miles, or 1,850,000,000 acres, of which 1,042,000,000 had been surveyed by June 30, 1895. This cost about \$322,000,000, of which the greater part had been got back by sales.

About 313,000,000 acres of surveyed land remained unsold, estimated with the unsurveyed land, excluding Alaska, to be worth \$1,000,000.

XVII.

OF RENT, AND THE POSSIBILITIES OF ITS ABOLITION.

RENT is the charge paid for the use of land. The man who in some way has obtained actual or legal possession of it will not let another man put his labor upon it to make its potential values actual values, by raising potatoes, or digging gold, or building a mill alongside the stream which runs through it, without paying rent. Now, if a farmer wants to grow potatoes, and there are two acres of land to rent, one of which will grow three times as many potatoes as the other with the same outlay for labor, fertilizers, etc., he can afford to pay three times as much rent for the first. The high rent does not add to the cost or price of the potatoes, because what is added on each bushel in rent is saved on each bushel in labor, etc. There is perhaps another acre so poor that "it does not pay to grow potatoes on it unless you get it for nothing."

This pays no rent: it is what economists call "norent land." Thus rent, high or low, is the measure of the increased productiveness of a piece of land over no-rent land, and it does not affect the price of products. This is known as Ricardo's doctrine of rent, though a Scotchman named Anderson preceded that great English economist in stating it. Superior land is like labor-saving machinery: the cost is saved in facility of production. This holds true even in city rents; Mr. Stewart's great store in New York never charged higher prices for goods, though the land was among the most valuable in New York, for the reason that its situation made it very productive of trade. So many people came there to buy that the big rent, divided among all the purchases, came to no more than the smaller rent of other stores.

There may be land close by which produces 20 bushels of wheat, and land far off which produces 22 bushels. If it costs the value of two bushels to bring the 22 to market, the land close by and the land far off are of exactly the same renting value. Thus accessibility, or nearness to a market, is equivalent to so much greater productiveness, and distant land is, in the economic sense, poorer land.

The price of wheat, or of any agricultural product, being determined by the cost of the part produced at greatest disadvantage, according to the first law of price, will depend on the cost of that produced on the poorest or most distant land. The true rent of any given piece of wheat-land, accordingly, would be the difference between the general price of wheat and the cost of producing and getting it to market from that piece. If a higher rent is charged, farmers cannot afford to hire it to raise wheat. They must either raise a more valuable crop than wheat, or not hire the land, or lose money. Of course this general law is much modified on particular pieces of land by special circumstances.

When the fertile wheat-fields of our great West were opened up, and the railways brought them close to the seaboard, the poorer lands East went out of cultivation, and the price of wheat went down. The deserted farm-houses of the New Hampshire hills and in the Connecticut valley in Massachusetts tell a part of this story. Massachusetts, which produced 119,783 bushels of wheat by the census of 1860, produced only 1813 by that of 1890, and the other Eastern States reduced,

or increased but little, their acreage and product. In England the farmers could only afford to cultivate the better wheat-lands and to pay a lower rent for these. But the existence in England of long leases or customary rents, and the great value set on land for manufacturing use and for social reasons, made landlords unwilling to so reduce rents; hence the great dissatisfaction among the English farming classes. This is the key to the great influence of our far West upon the agricultural holdings of England and our Eastern States. The effect of the increasing wheat crops of India and Russia upon us is not yet fully developed.

The free operation of the economic laws of rent is restricted very much by the tenure of the letting. The labor and fertilizers a man puts upon land do not come out again in the first crop or in the year's crop; they are more or less permanent "improvements." So in still greater degree are the fences and buildings necessary in cultivating the farm. On yearly tenure or short leases the tenant must therefore pay a lowered rent, or refrain from improving the land. In New Zealand each tenant has the right of purchase at a fixed price, and can therefore do his best for the land.

In England the landlord makes most of the improvements, and the tenant is in a measure protected, even in yearly tenancy, by custom and what is called "a good understanding." In the north of Ireland the custom called "Ulster tenantright" binds landlords not to dispossess a tenant so long as he pays his rent, and it permits the tenant to realize on his improvements by selling his tenant-right to another person acceptable to the landlord. In other parts of Ireland much bad farming, bad politics, and bad blood have come from the ill understanding on this point—the exhaustion of land and evasion of payments on one side, and rack-rents and summary eviction on the other. America has the great blessing of absolute free-trade in land, so that each tenant makes his own bargain for both price and time of his letting; but as only a small percentage of the 4,700,000 farms in this country are rented for money, the question has not become of great importance here. Farms worked on shares number more, one half or one third the crop being paid for the use of the land, buildings, etc., and this system, called "metayer rents," exists in many of the older countries.

Rent, being the greater productiveness of the

land rented above the poorest land actually cultivated, tends to increase, as increasing demand (by increase of population or of wants otherwise) brings poorer and poorer land under cultivation. When all the arable land in the world is taken up, that land which can only be made to produce a bare subsistence for the laborer becomes the norent land, or standard from which rents count, because from it the laborer gets no surplus above bare subsistence to pay rent. If rent were paid he has not enough to live on, and as there is no cheaper land he would die. But still the Ricardo doctrine of rent shows that rent would not be a part of the price of agricultural product, because it is only the equivalent of saved labor, and the extreme statement is made that if the whole \$200,000,000 paid in England as rent for cultivated lands were remitted, it "would not add a pinch of flour to the sixpenny loaf." For the price of bread is not made by the English farmer, but from the far-off wheat-fields of Dakota, with which he must compete. The remission of rents would be to the English farmer so much gain, which for the first season he would gladly pocket himself. At once, therefore, rents would again

commence; the landlord would demand part of this gain, which is rent, or the tenant would sublet and live on the gain, receiving rent instead of paying it. So long as some land is better than other, and on this better land labor is saved, the price of this labor will, in the order of nature, be somehow paid as rent. If the whole world were redivided into equal lots, at no rent or equal rent, the rent process would instantly recommence, because each person would want the better lands. If all land were equally productive and equally accessible there would be no rent till it was all occupied, at which point those who had no land would be ready to buy or rent from those who had.

There have been many plans to abolish private ownership in land, and so get rid of rent. But rent cannot be got rid of, for so long as one piece of land is better than another, it would be better worth having. It is as true of land as of any other kind of property, that if it were communistically redistributed at any moment, the men with more brains or industry in a time of peace, or of more force in a time of war, would presently get hold of more land or better land than the men of less brains or less force.

"The nationalization of the land," advocated by Henry George in "Progress and Poverty," is best stated in his own words: "The remedy for the unjust and unequal distribution of wealth apparent in modern civilization, and for all the evils which flow from it [is], We must make land common property.... I do not propose either to purchase or to confiscate private property in land. . . . Let [present owners] continue to call it *their* land. Let them buy and sell, and bequeath and devise it. We may safely leave them the shell if we take the kernel. It is not necessary to confiscate land; it is only necessary to confiscate rent. . . . Appropriate rent by taxation. . . . Abolish all taxation save that upon land values." This, it will be seen, is not a scheme to abolish rent-for Ricardo's theory of rent is used by Mr. George as the groundwork of his argument—but to require private owners to pay the equivalent of rent to the Government as taxes. The private owner would not be deprived of return for the capital he had invested in buildings or other improvements, but would be practically a State-tenant, paying ground-rent to the Government on a perpetual lease, and perhaps sub-letting to other users or occupiers. This, Mr.

George argues, would prevent the withholding of land from productive use, and prove the cure-all for our social ills.

Herbert Spencer, in his "Social Statics," had already spoken of such a "change of landlords" as commanded by equity, consistent with the highest state of civilization, and duly subordinate to the law of equal freedom. "Separate ownerships would merge into the joint-stock ownership of the public. . . . Stewards would be public officials instead of private ones, and tenancy the only land tenure." John Stuart Mill looked forward to such a tenure, to be brought about by the purchase of vested rights by the State. The objection to Mr. George's plan is seen in the fact that the man who owns land to-day may have bought it only yesterday with the direct earnings of his labor, and the confiscation of rent would practically deny to him the benefit of his earnings, and thus subvert the foundations of all private property. Mr. George cites against this the fact that the freed slaves were not paid for by our Government during the war, and argues that the interest of the few must be put aside in the interest of the many.

The economists who look upon Mr. George's

plan as indirect communism, nevertheless recognize the land question as one of the most serious problems in Economics. As we cannot increase the quantity of land, it is important that what there is should be used so as to produce most, and that the holding of arable lands unused should be discouraged. Most economists agree that land, and especially the unearned increment of value, is a proper object for the chief burden of taxation, a doctrine advocated by Mill as president of the Land Reform Association. The taxation of all land, unimproved on the same basis as improved, so that it cannot be "held for a rise" without cost and thus accumulated into great fortunes, is likely to be the chief method of raising revenue in the future.

Land, then, is the first element of production, the *sine qua non:* in distribution it claims its share as rent, however this rent may be concealed, or cloaked, or called by other names, or temporarily balanced by confiscating taxation. Without land labor has nothing from which to produce. The earth is, in truth, the mother of us all and of all our wealth.

XVIII.

CAPITAL AND INTEREST.

WHEN a settler, far off from home or friends, and dependent for his food on the little farm he has cleared, denies himself the extra loaf of bread he would like to eat, that he may save the wheat as seed for next year's crop, he becomes in that measure a capitalist, or owner of capital. Capital represents that self-denial in the past which becomes the means of future prosperity; it is that part of wealth, *i. e.*, of stored labor, used to produce wealth. As we spoke of potential wealth, so we may speak of potential capital, the reserve which can be, but is not now, being used to produce wealth.

Capital is not a prime factor in production, because it can always be analyzed back into land and labor; but it is in one sense the most important factor, because it makes possible the higher

industrial organization, and enables labor to work to the best advantage. It has been called "the universal motor," because it keeps everything going. Without it each man would be obliged, like a savage, to dig or hunt his breakfast and his material before he could get at the rest of his day's work: there would be no division of labor, and each would work at his worst.

Those kinds of capital which can be used for a long time over and over again—as a house, or mechanical "plant," or the road-bed of a railway are called fixed capital; those kinds which, like food, fuel, and material, are commonly used but once, and are destroyed in using, are called circulating capital. As a country is more civilized, the proportion of fixed capital increases, and particularly that kind of fixed capital which becomes literally common wealth—as good roads, bettered watercourses, and sanitary improvements. To invest capital is to exchange circulating into fixed capital. But there is in fact no strict line, for many things are destroyed by or wear out after a few usings, as a file, and are between the two. So, also, it is not possible to draw a strict line between wealth used as capital or not used as capital: a man's breakfast may or may not be turned into a day's work.

It is a mistake to confound capital with money. Capital is not merely money, but wealth, commonly represented in terms of money; it is paid for by Interest, which pays not for the use of money, but for the use of those things which money buys. These things are, in general, subsistence (including food, clothing, dwelling, fuel), tools (which may be a hand-tool, or a steam-engine, or a factory), material. A man first uses his savings to make sure of to-morrow's food; next for clothing; next for a place to live in. These secured, he gets tools, so as to work with advantage; last, he buys materials on which to use them. The reason that capital is commonly confused with money is that a borrower, wanting food, tools, or materials, finds it more convenient to get the money and choose these for himself than to have the articles themselves loaned to him

It is estimated that the saved wealth of a country, aside from what is deposited by means of improvements in that great savings-bank, the land, rarely exceeds two to three times its annual production, and that, as to food, the world is thus al-

ways within a year or two of starvation should production cease. The aggregate of productive capital, it is also reckoned, approximates the total value of land, which naturally rises as increased capital increases the demand for it. The census of 1880 estimated the total property of the United States, land included, at \$65,037,000,000. Our productive capital is probably within \$35,000,-000,000, while our annual product, Mr. Atkinson concludes, is about \$14,000,000,000. If all the property in the United States were distributed communistically among its people there would be about \$1030 each, or of annual product about \$200 each. The census reports the total investment (chiefly fixed capital) in manufacturing industries as \$6,525,156,486, and the cost of material (circulating capital) as \$5,162,044,076, which, with \$2,283,216,529 wages, gave a product of \$9,372,437,283.

The man who by self-denial saves capital—as, for instance, seed-corn—may either plant it himself or lend it to others to plant. If he refrains from using it himself, he is entitled to compensation for this further self-denial. The man who borrows does not borrow unless he expects to

gain, and he is willing to make payment. This is *interest*, usually stated in money terms for a definite period, as 6 per cent. per year, *i. e.*, for every \$100 worth borrowed \$106 is to be returned at the end of a year, or \$112 at the end of two years. In "compound interest" the principal and interest are added together, as a new principal from which interest is reckoned, so that at the end of the second year 6 per cent. is to be paid on \$106, making \$112.36 to be returned.

The notion that capital is money only, coupled with Aristotle's doctrine that money is sterile or unproductive, has led to the general outcry against interest, of which thriftless or dishonest or unsuccessful men are glad to take advantage to avoid paying debts. The Mosaic rule that the Jews should not take interest from their poor countrymen—really a direction to them to be charitable -and the application by the Church Fathers of the words "gatherest where thou hast not sown" to interest in general, led to a religious prejudice against interest, which was held by Luther. Calvin, however, saw that money is borrowed "as an instrument of production: it is not, then, from the money itself that the profit comes, but from the use that is made of it;" and his influence has helped to change the religious sentiment as to interest.

Usury laws, providing forfeiture of the loan or other penalties for taking more than a specified rate of interest, were early enacted by most nations; but since the rate of money is regulated not by law, but by the demand for the things money buys, these laws only made money harder to get, because of the added risk, increased instead of lowering the actual interest, and gradually fell into disuse or were repealed. Usury laws supposed to protect the debtor were often balanced by imprisonment for debt, supposed to protect the creditor, which were equally useless and harmful. In Rome the debtor became the slave of the creditor: as much as 48 per cent. interest was exacted by Brutus himself; and when the later magistrates "flattered the people" by prohibiting interest and abolishing debt, usury became frightful. On the contrary, Solon's laws gave Athens freedom of contract in borrowing and abolished debtslavery, and though the rate of interest was high, Greece remained industrially prosperous. In England, Edward VI. prohibited interest; Elizabeth

permitted 10 per cent., and thus greatly promoted trade; a statute of Anne voided contracts at above 5 per cent. This law itself proved void, and was repealed piecemeal, and in 1854 the last vestige of usury law was removed, except in regulations as to pawnbroking. In this country all the States define, usefully, a *legal rate* of interest, the rate to be paid where no contract is made, varying from 5 per cent. in the older to 10 per cent. in the Far West States. Most of them fix also a usury limit, from 6 to as high as 18 per cent., the last in Idaho, where usury is a misdemeanor punishable by fine and imprisonment.

A man is of course less willing to lend his capital when he is not quite sure he will get it back. Sometimes, as usually at the West, he is secured by *mortgage* on real estate—the word meaning "dead-pledge," because on non-fulfilment of the bond the pledge, or property, became dead to the mortgagor and passed to the mortgage; sometimes, as usually at the South, by pledge of crops on which *advances* are made. In such cases the risk depends much on the facility which local laws and public opinion give to the realization of the pledge. If there is doubt as to the security of the

capital, the loaner adds insurance, and so makes interest higher. On Wall Street, when a particular stock was "short," that is, the demand ahead of supply, and the risk of losing great, as much as I per cent. a day has been paid for the loan of that particular stock, when money itself on good security was under 5 per cent. a year. Insurance is a sum set aside to balance the risk of loss; when it is paid to a fire-insurance company, the company undertakes to make good your house if it burns down; more often, a man "insures himself" by charging a little more than he would in a sure transaction. Thus rent is a little higher because a bad tenant may abuse the land; labor is a little higher for day's work than if work is made sure for a whole month; but, most of all, insurance is felt in increasing interest. Moreover, "capital is timid," and it is estimated that "the unwillingness of capital to emigrate," i. e., to take risks in foreign countries, often adds 2 per cent. to true interest. Another element added to true interest is the cost of commissions for the work of the intermediaries who obtain the money and investigate the security offered. Were it not for these, the rate of interest the world over would be much

nearer an average rate than wages can be, because circulating capital is more easily transported than labor.

Interest is high in new countries, first of all, because labor can be used to great advantage if food and tools and materials can be got; for the use of these, therefore, a high charge can be paid. On the other hand, in new countries nobody has had time to save; capital is scarce, and must be brought from afar. A high rate of interest attracts capital, and the more capital flows in the more interest is lowered. A high rate of interest carries therefore its own cure. But this is checked, and interest, secondly, raised, by the tendency of a borrowing community to make laws against the creditor class, so that a high insurance is added to interest. Thirdly, these countries are distant from centres of capital, and their conditions little known, so that commissions are high. Many Western communities, in trying to make interest cheap by law, make it cost more. Stable government, good laws, and commercial honesty are what give a community the lowest market rate of interest. Thus the United States can now borrow on its bonds and Great Britain on its "consols" (consolidated bonds) at 3 per cent., while repudiating States are checked in development by paying the penalty of enormous rates of interest.

Proudhon, the French socialist, who warred against capital and held that "property is robbery," organized a "People's Bank," which was to abolish interest proper, to get rid of insurance by dividing the loss among all the depositors, and to bring the rate of interest down to the mere cost of administration. Before it got to that point the bank failed, just as the man's horse died when he had him down to one straw a day and expected him to live on nothing to-morrow. No scheme or law can make people lend things for nothing. The increasing savings from the increased productive power of the world, the greater security of property, and the new facilities of intercommunication are, however, steadily lowering interest. As the world progresses, wages, the relative share of labor, are rising, and interest, the relative share of capital, is falling; and it is not progress, but mistaken legislation, that acts against industry. Capital, in fact, enables labor to earn more with less effort in the same time. Thus capital is the friend of labor. Its function is to make labor more productive, by enabling it to work to more advantage, under better conditions, with better tools, and especially to make possible the division of labor. It enables labor also to avail itself of the forces of nature. It enables the laborer to earn a full dollar where otherwise he would only have earned a half-dollar, and it gives him for his dollar, in product, more than twice as much as he could have got for his half-dollar. It is not capital or interest, but the abuse of riches, that invites antagonism from labor, as we shall see later on.

XIX.

OF LABOR AND THE DIVISION OF LABOR.

THE prime factors of wealth are LAND, from which we get the original material, and LABOR, which gives to that material most of its final value. If land is the mother, labor is the father of wealth. Capital, which is past labor stored, makes labor more productive by enabling it to use the forces of nature, by giving it better conditions of work, and by promoting the division of labor. Brains, which is head labor, looking into the future, makes labor more productive by directing it so as to avoid waste, to work to most advantage, and to meet the conditions of the market. Both help labor to "a fair chance." Without their aid labor is like a workman without tools, and blind. When, under fair conditions of land tenure, labor, capital, and brains are in harmony, production is greatest, and there is more product to be shared among all.

The progress of industry consists in the increase of production from a given amount of human labor. The great steps forward in civilization have been the harnessing of the forces of nature to do work for men—the discovery of fire, the taming of animals, the use of wind and water power, the production of gunpowder, the invention of the steam-engine (which alone has multiplied the working power of the world a hundred-fold), and the application of electricity. Without machinery, which is one form of capital—the stove, the wagon, the windmill, the ship, the water-wheel, the blasting-drill, the engine, the electric battery labor would still be in its infancy, earning only the wages of a child. Alongside of these improvements has been the bettering of the conditions of labor - in housing, clothing, and heating, so that there may be no waste of fuel in the human machine; in better and cheaper food, in improved hand-tools, last and best in developing man as man, so that his body becomes the better servant of his higher nature. Finally, the division of labor, so that each man may do that work by which he can produce most, has been the crowning triumph of economic progress.

The division of labor commenced, with the saving of capital, in very early times, when one man ceased to make everything he needed for himself, and by doing fewer things more effectively saved a surplus which he exchanged for other things made by other men. Thus he learns his one trade earlier and easier. He becomes more skilled in one kind than he could be in several kinds of work. He saves the time he would lose in passing from one work to another. He knows his work so well that he begins to make little improvements and inventions that help it, as the boy Humphrey Potter tied a string from the stopcock to the walking-beam of his steam-pump, and so helped to make the steam-engine of to-day. The strong man can do the hard work, and leave the easier work to the weak, as women and children. In a hundred ways the division of labor has fulfilled the great economic purpose of getting most with least work, until at last we have, with the help of machinery, the vast industrial organization which exists to-day, an organization of the highest type and of the greatest producing power. In the great factory which makes only one kind of cotton cloth, great numbers of men work with their hands to do one thing useless by itself; others serve as watchmen; others oversee; others keep books; others exchange the product; others lend the money to buy material and tools, to hire buildings and land; while somewhere there is the hardworked brain or brains, the most decisive factor of all, without which the organization would no longer exist. The result is that one man's work makes as much cloth as fifty did of old at weaving homespun; each yard of cloth costs less, but the laborer, working fewer hours, earns more each day.

It seems to be a law of nature that the finer and more complex is an organization, and the greater its power, the more danger is there in its breaking down. A chain is only as strong as its weakest link. The best steam-engine may smash itself to bits if a tiny pin gives way. The work of years in undermining Hell Gate would have been lost if a careless workman had neglected the joining of a single electric wire, or if the signal of destruction had been prematurely made. So the dangers before our highly organized industrial system are very great. A new improvement throws men out of work for a time; the man who does only one thing finds it difficult to earn a living other-

wise; or if the brain dies, the hands stop. The remedy is not in smashing the machine, but in taking every care that it works well. We shall see what this means later on.

The great law of the division of labor is that each man shall work to the utmost of his power, by using his skill at its best. It is based on differences between men in their working and earning power. Production varies with both quantity and quality of work; the industrious man produces more than the lazy one, the skilled worker more than the unskilled. Each worker is to learn what he can do best, and do that. Thus he contributes most to the general welfare, and earns most for himself. This applies to nations as well as men. The higher the capacity of a man or of a people, the less can either afford to do the lower grades of work. The farmer cannot afford to grow one clip of wool on an acre that will grow twenty bushels of wheat. The merchant cannot afford to use a \$5000 man at the work of a \$1000 clerk, or a \$1000 clerk at the work of a \$200 boy. He could himself sweep out the store quicker than the boy, or sell goods faster than his best clerk, but he cannot do the lesser work if he is to have

time and force for the greater. Thus, also, a Middle State with farm-lands lets wool-raising go to the grazing lands of the Far West States. One nation imports from another products which it cannot raise without giving up more profitable industries. A race capable of higher work uses another for its lesser service, as the Irish, first doing the lower work for Americans, is now rising in the social scale and seeing its work taken up by the Chinese. This is the key to domestic service; the attendant who by working a day saves you an hour enables you to produce tenfold.

In almost every product labor forms the great part of the cost. In one sense almost all value comes from labor. A horseshoe is hammered from a bar of iron, heated from a coal-fire, by the blacksmith's labor; but the hammer and the anvil, the iron and the coal, are themselves the product of labor, and the very mines from which the ore is dug get a great part of their value from the general labor of society which has made them accessible. So, too, with the products of the farmer; not only his labor on the crops, but the labor which grew the seed, which made the tools, which ground the fertilizers, enters into his bushel of po-

tatoes. It does not follow, however, that any product—for instance, a ton of pig-iron—is in any practical sense *all* labor. The rent of the mine, the profits of the mining operator, of the transportation company, and of the furnace-man, remain a considerable proportion of the actual price.

In specific industries, however, the proportion of labor to material, as that industry receives it, is widely different. According to the census of 1890, in brickmaking, out of \$67,770,695 annual product, \$32,695,189 (or \$300 to each worker) was wages, and only \$12,639,597 material, besides the return on \$82,578,566 capital; and in watches, out of \$6,051,066 product, \$3,688,927 (or \$552) to each worker) was wages, and only \$995,740 material, besides the returns on \$10,106,114 capital; while in malting, out of \$23,442,559 product, but \$2,103,200 (or \$569 to each worker) was wages, against \$17,100,074 material, besides the return on \$24,293,864 capital. Our total annual manufacturing product was put at \$9,372,437,283, of which (there being no report of rent) \$5,162,-044,076 was material, \$2,283,216,529 wages, and (at 5 per cent. on the \$6,525,156,486 capital invested) \$326,250,000 interest. In this reckoning material is counted several times, e.g., as wool, cloth, and clothing; or as ore, pig-iron, bar-iron, and the finished machine. It is evident that when the material is very cheap, as is clay, or very little of a valuable material is required on which to put skilled labor, as in watch-making, the proportion of wages to product is high; when the material is valuable, as barley, and the labor little, the proportion of wages to product is low. The amount of time during which the material is finishing, and the cost of plant necessary for its treatment, also reduce the proportion of labor to capital. One of the best illustrations of the relative total returns to labor and to capital is found in the statistics of M. Godin's great co-operative experiment, the Familistère at Guise, France, where the remuneration to labor is found to be eight times that to the capitalist.

As we rise in the scale of industry the original material bears a less and less proportion to the labor involved. There is, finally, one great exception to the general truth that labor must have material from the earth from which to produce, and that is the immaterial labor of the producer of ideas. The work of the writer, the artist, the in-

ventor, is creation, the giving of material form to an immaterial idea. The consumption of brainfibre or the food from which it comes, and of the paper and ink, the colors and the canvas, the metal, or what material it may be, is so inconsiderable as to be of no account. Yet a book, a painting, a piece of music, an improvement in machinery, have the highest of exchangeable values. They are the divine instruments, the tools of God, by which humanity itself is shaped to fairer fashion. The invention of the cotton-gin and the writing of "Uncle Tom's Cabin" were chief factors in making possible the abolition of slavery, and the Proclamation of Emancipation has added more to the economic progress of this nation than any act since the Declaration of Independence.

XX.

THE WAGES QUESTION.

THE share of LABOR, in distribution, is Wages. Work done under direction earns wages; directing work, as we shall see later, earns profit. The word Labor usually refers to work thus under direction. The "wages question" is, therefore, what is the proper share of the laborer, working under direction, in the distribution of product? There can be no more important question in a country organized "for the greatest good of the greatest number," in which wage-earners make up the great body of the commonwealth.

The word Wages, unfortunately, is used both in a general sense to mean the pay of labor, whether by time, by piece, or by share of product, and in a specific sense to mean time-wages, or, as defined by Professor Sumner, "the payment per unit of time by the employer, in return for which the em-

ployé agrees to use his productive powers during the time specified as the employer may direct." This lack of distinctive words has led to real confusion in arguments. It is, perhaps, most clear to use the word wages in the general sense, and the phrases time-wages, piece-wages, and share-wages for the different ways of payment. Time-wages may be by the hour, day, week, month, or year; in comparing day-wages with year-wages, it must always be asked how much of the year the laborer has had work. Piece-wages is the pay per article produced. Share-wages, which correspond to metayer rents, may be a share of the product itself or its equivalent in money; this transfers to the laborer a part of the risk usually taken by the employer. The "sliding scale" of payment in coalmining, where miners get so many cents per ton when coal is at a stated price, and so much more when it is higher, is a combination of piece and share wages. The "truck system" of payment has no reference to any of these, but means that the employé is given orders for goods instead of money, a system so much abused by employers who were store-keepers and charged extortionate prices, that in some parts it is forbidden by law.

The confusion of time-wages and piece-wages, in reckoning the cost of labor, has created extraordinary confusion of the wages question. It is often asked, does price make wages, or do wages make price, e.g., does a factory girl get a dollar a day because a yard of cotton is ten cents, or is cotton ten cents because factory girls get a dollar a day? The question is not rightly put, partly because price varies from cost with demand and supply; partly because wages are only one element of cost; but chiefly because it is time-wages which are here meant, and the cost of labor cannot be reckoned from time-wages. The actual pay of any given laborer is determined by his productive power, the amount of product or number of pieces he can turn out in a given time. A man who can make two pair of shoes in a day will, in the long run, earn twice as much as a man who can make only one pair; his pay, looking at piece-wages, would be the same, though his "wages," in the sense of time-wages, would seem to be double. Two men of equal skill working in the same shop, under like conditions, will, as a matter of fact, earn about the same by the week's end, though one is working "by piece," the other "by time." But in

the case of two men working, as in different countries, under quite different conditions of strength, industry, skill, tools, machinery, etc., time-wages will not be at all alike, though piece-wages may be nearly the same. Thus an American shoe manufacturer, paying nearly double English time-wages. gets shoes made for only 33 cents per pair which cost an English manufacturer 50 cents for labor. Thus, also, an English manufacturer pays twice or thrice the time-wages of German, French, and Italian, and yet finds the labor-cost less. American labor, with its advantages of pluck, skill, and machinery, is at once the highest and the cheapest in the world. On such questions as the tariff we have been wasting words in talking about "wages," meaning time-wages, and overlooking piece-wages. The higher time-wages in England and Germany show that the question is not one of "protection" and free-trade. The question is always, how much can the laborer produce?

The fallacy of reckoning price or basing a currency on "labor-value," so called, was shown when Robert Owen, about 1830, opened his "labor-exchange" in London, and bought and sold goods with notes representing the "labor-value" (or num-

ber of hours' work) in each. His customers quickly used these notes to buy up all the desirable goods in his store, which, being left with a great stock of unsalable things, failed in a few weeks.

Product pays all. Wages increase with product. These are the two main facts of "the wages question." Out of product must come the returns to land, capital, labor, and the directing brains. Rent, the equivalent of labor saved, and interest, a payment for help to labor, are comparatively fixed, and do not decrease the pay of labor. Wages remain the chief and the most variable part of cost. Profit, the pay of the director of industry, is, we shall see, the difference between cost and price, involving the risk of loss when, for the time being, price falls below cost. Labor cannot get more than all there is to divide; it gets less by the amount of rent and interest, and if there is no margin left for profit, the employer is driven out of business, the demand for labor is less, and wages fall. Out of a fixed product, therefore, labor cannot get more unless the others get less, and in crippling them, labor cripples itself. Out of an increasing product, labor not only gets more, but gets a greater proportion, rent and interest being the more fixed, unless the profit-maker gets the difference. But it is a fact in progress that "in any given product, profits diminish, wages increase." Thus labor, paid out of product, gets more and more wages as product increases.

For a long time English economists held that wages did not depend upon product, and could not exceed "the portion of the existing capital available to pay labor," which they called the Wagefund. This was another of the mistakes which arose from the confusion of wealth with money. It was noticed that money was paid out for wages before the goods were sold or even finished. But, as a matter of fact, an additional value had been created by labor, greater than the amount of the wages, before the wages were paid, for payments are almost always, with such exceptions as a lawver's retainer, made at the end of the day, the week, or the job, not at the beginning. The employer may not have turned this added value into money, but he can usually borrow on or sell halffinished products, were it not that he prefers to wait to get the full price for the completed goods. Instead, therefore, of distributing the product of the work among his workmen as their wages, re-

serving his own share, he pays the equivalent in money. But the greater the product of the day or the week the more wealth he has, the more money he can get, the more wages he can pay. It is true that a man must first eat his breakfast before he can do his day's work, must have tools or machinery or a fit building to do his work well, but in no sense is the capital so employed distributed to him as wages. Each man begins on what has been previously stored, as in infancy he lives upon his mother's milk, but this has no relation whatever to the payments made to him for work done. The Wage-fund notion lent itself to the mistake that the more workers the less would be the wages of each, and that one man could not get higher wages without another getting lower wages. If product, like land, could not be increased, the fewer people the more each would have, but product multiplies and so gives a larger share for each.

It has also been said that labor is not paid out of product, because wages are predetermined by agreement. But the arrangement is based on the calculation of product, and is only another example of the commutation of indefinite shares for definite money payments found in rent and in in-

terest also. The risk is taken from labor, but the pay is all the same an advance estimated with regard to product. Always it is the product which pays.

There has been much discussion among economists as to whether labor is a "commodity," that is to say, whether the pay for it follows the ordinary laws of price for things sold in the market. The truth seems to be that, for the most part, wages are determined by these same laws, but that these laws are greatly modified by several distinctive elements: that while things merely deteriorate by keeping, labor unused for a day is absolutely lost: that the human machine is much more variable in its requirements and results (as food, conditions of work, and product) than any other; and, above all, the human or mental element, in which emotions and affections play a part as strong at least as dollars and cents. "Man is of all luggage," said Adam Smith, "the most difficult to be transported." He gives "hostages to fortune," said Bacon. He is anchored in his home. These conditions separate the real man from the thing or the "economic man," and give us reason to take care that our economic organization recognizes human distinctions.

XXI.

THE RATE OF WAGES.

WAGES cannot rule higher than the point at which an employer must stop work or lose money. Wages cannot rule lower than the cost of living of the laborer with so much of a family as will keep up the supply of labor for the immediate future. Employers, nevertheless, often keep mills going at temporary loss, because of sympathy with their employés, or because it would be still greater loss to let the "plant" lie idle, or in the hope of covering the loss by early gain, and laborers sometimes find themselves compelled to work below the cost of decent maintenance, using up their savings or running into debt, rather than to be without work at all. A man, wife, and two or more children (so that at least two shall grow up) must be provided for in average wages, except so far as women and children help to earn. The census returns show that each worker supported, on the average, a group of three persons. The average wages in all American manufactures were \$484, or in 1890 about \$1.60 per working-day.

The lowest time-wages in the world are those of the common laborers in China and on the African coast, who live on a few handfuls of rice and earn a few cents a day. This ill-fed and ill-paid labor cannot compete with the best-paid American labor; the "Fabrica de Tocuyos," at Lima, Peru, which made coarse cottons from Chinese labor at \$4 per month, found it difficult to compete in Peru with New England cottons whose price was raised by the high Peruvian tariff. A half-fed horse will do only half-work. So with a man. Ten laborers in Ireland raised less than four in England. Brassey, building the Paris and Rouen railway in 1842, employed 10,000 men, of whom 4000 were taken at great expense from England; side by side, in the same quarry, Frenchmen worked at three francs, Irish at four francs, and English at six francs a day, and it was the English work that cost least. On East Indian railways, coolies, living on two pounds of rice and a pinch of curry for 4 to 6 cents a day, and knocking off work when

their wants were supplied, earned from 8 to 12 cents for a day's work, yet for all but rough earthwork the cost of railway work proved the same in India as in England. In farming, it has been shown that two English mowers will cut as much grass as six Russian serfs; under low time-wages the yield of crops in Russia is less than half that of England, and the smallest in Europe.

"Experience teaches," says the younger Brassev, "that there is a most remarkable tendency to equality in the actual cost of work throughout the world." Where difference exists, it is usually found that the lowest labor-cost (piece-wages) is associated with the highest time-wages. Thus England, paying higher time-wages than France, Germany, or any other European country, commands the trade of the world, especially in manufactured goods. When we get our materials cheaper, the still higher time-wages of the United States will probably bring us much of England's export trade. "The higher wages of American labor," said Secretary Manning, "are at once the secret and the security of our capacity to distance all competition from 'pauper labor' in any market."

The laborer, selling his labor, seeks, of course, like

any other seller, to get the full market-price from the buyer. The "heathen Chinee," with his dreaded "cheap labor," soon learns to ask as much as the Irish washer-woman for washing a dozen of clothes, and as a domestic servant he gets \$20 a month or more in California. This tends to equalize laborcost by levelling wages up.

Wages, nevertheless, vary in different countries or—often quite as much—in different parts of the same country, as well as in different occupations, according to various conditions, chiefly dependent on local conditions of supply and demand. The Labor Report of 1879 reported painters as earning \$7 to \$8 per week in Great Britain, \$10 to \$16 in New York, \$6 to \$12 in Chicago. Carpenters in New York city are said to average \$641 per year, and in New Jersey, just across the river, \$476. For 1882, farm wages were reported at \$8.10 per month in North Carolina, \$17.95 in Iowa, \$27.08 in Colorado. Much of this is difference in timewages but not in piece-wages, as the higher paid men do the most and the best work, and so are drawn to the cities and other superior labor-markets. Such real difference as there is within the same occupation is largely accounted for by the

fact that labor cannot flow instantaneously to the best market.

As between different occupations, the differences are more real. The average pay of brickmakers (census of 1890) was \$300; of cotton-operatives, \$313; of wool-operatives, \$360; of glass-workers, \$480; of watch-makers, \$552. High cost (in time or money) of learning a trade, or its disagreeableness, makes workers fewer and wages higher. The probable irregularity of employment or the improbability of success adds an element of insurance to wages. The superiority of physical skill or moral quality, as honesty, required, is another element. "We want a man who won't lie to us, and we pay for that," said a large employer. So, also, in any one trade, superior skill or unusual fitness, accomplishing more, gets higher wages. Thus it is impossible to say that all workers, or all the workers in any one trade, shall get the same wages; it is against the laws of nature. If a trade is underpaid, workers will go out of it; if overpaid, they will flock in; but the average thus produced can never equalize the conditions of particular trades and individuals. There are here real differences of value of work which must count.

As between different periods, the invention of the steam-engine and of labor-saving machinery has so revolutionized labor that wages before and after their date are difficult to compare. There has also been a tendency to simplify the old complex payments in kind and in privileges as well as money, into direct money wages. In the thirteenth century, according to Thorold Rogers, English field-labor was paid 2d. a day for men, 1d. for women, a halfpenny for children (doubled in harvest), aggregating in the year £2 15s. for a single man, or £4 with wife and two children. A country artisan, working 300 days, earned £3 15s. to £5; one in London, £6 or more. Mutton and beef were a farthing a pound; a laborer's board I_4^1d . to I_2^1d . a day. Five hundred years after, in 1760, the division of money and the rise of prices giving the penny but one-twelfth the purchasing power, the English laborer, he thinks, was less well paid, with less hold on the land. For two of these centuries the condition of labor was steadily good, but the coinage of base money, the confiscation of the benefit funds of the guilds, and the act of Elizabeth providing that no person should practise any art without seven years' apprenticeship, and

empowering the justices in Quarter Sessions to fix the rate of wages in husbandry and handicrafts. worked together to debase labor and lower wages. This "conspiracy to cheat the English workman of his wages," lasting two centuries and a half (1563-1824), compelled the enactment of the accursed poor-law, which, by prohibiting free movement from one parish to another, and by pauperizing labor through the doling out of poor rates, and thus preventing a natural increase of wages, held back labor from its due share in progress. The new demand for labor under the factory system gave the working-man a new chance. The general tendency of progress since, where labor and trade have not been hampered by restrictive laws, has been to increase the time-wages of the laborer and reduce the cost of most of his supplies.

Up to the present century, legislation as to wages was always against labor. It was denied an even chance. The tide has now happily turned, and not only have the old laws been repealed, but various legislative safeguards have been given to labor to protect it from abuse and to help it to the point where it would have been without the

legislation against it. "During the present century," says the Duke of Argyle, "two great discoveries have been made in the science of government: the one is the immense advantage of abolishing restrictions upon trade; the other is the absolute necessity of imposing restrictions upon" [i.e., upon the abuse of] "labor." Out of this spirit have come the factory laws, the employers' liability acts, and the laws for the protection of children, in modern England; out of this comes also the agitation for the eight-hour law. The danger now is that legislation will be pushed too far in the other direction, so that by crippling employers and frightening capital, the demand for labor will be reduced. Ill-advised laws harm labor. No employer can pay ten hours' wage for eight hours' work, or pay the poor workman as much as the good one. If he did he would fail, and throw all his laborers out of work. The law, it seems probable, cannot usefully go further than to define a legal day's work where no contract is made.

There are many who think that by limiting work, or the speed at which they work, wages can be raised. What this really means is that by restricting men from working you can produce scarci-

ty or monopoly value. If you can have only a hundred hats made when two hundred are wanted, the hatters, for the time, can get a higher price. But this can be arranged only in small skilled trades for a very little time, and even then the community—that is, laboring men in general—must suffer. Many laborers also will be thus kept idle, and the workers must pay through taxes for their maintenance as paupers, as they pay for the keep of convicts when these are not made to work.

There is one way in which restriction does increase wages. In the Black Death of 1349, England lost a third of her population. Wages rose so that Parliament passed the infamous Statute of Laborers, which decreed that no one should refuse to work at, and no one should pay more than, the wages "customary" in 1347. The estate accounts of the time show how it failed; real entries of 6d. a bushel for threshing barley were crossed out and the legal $2\frac{1}{2}d$. put in. So, too, the Crimean war raised wages throughout Europe, and the Civil war wages here. This is the bettering of one man through the misfortunes of his neighbors.

Yet the increase of productiveness is the one way in which wages, in general, can be raised.

Many wage-earners at one time looked to "cheap money," i. e., plenty of greenbacks, to do this. But as wages went up in greenbacks, this substitute-money went down and prices went up, so that the wage-earner could buy no more, in fact less, than before. For the rate of wages is always to be tested by what wages buy, and not by the currency in which wages are paid. It is when all workmen work hard, with the best advantages of machinery, that there is more product to divide, higher wages and cheaper prices, and the two hours' leisure can be gained because so much more work is done in eight hours.

XXII.

THE CAPTAIN OF INDUSTRY: THE DIRECTION OF LABOR.

THERE is a fourth and final factor in production, overlooked by many economists and often forgotten in the discussions of working-men. This is BRAINS, head-labor, which directs labor, and for its share in distribution gets Profit. The French speak of the "entrepreneur" or enterprise-man, and Adam Smith refers to the "undertaker" of work, but, for the most part, he is considered an agent of capital or confused with the capitalist himself. The word Director more clearly defines him; he directs how labor shall be applied, what shall be produced, and if his judgment is wrong instead of right, the consequent misdirected production brings about the disasters of modern industry. For what we miscall "over-production," "ill-distribution of production," "under-consumption," is largely the misdirection of labor-over-production of the wrong thing and under-production of the right thing. The Director is thus the important person of the industrial organization—the leader, the master, the captain of industry, the organizing force. For while capital is timid, the director is the progressist. It is through him that leadership, mastery, tells in the economic world.

It has usually been considered that this director or entrepreneur is only a higher class of wage-earner, and that profit is part of the return of capital after his salary has been deducted. This view is one result of the common association in one person of two or more of the several elements in production. The shoemaker who buys leather and has his own kit of tools and hires men is to that extent a capitalist and director. But in the highest industrial organization there emerges this fourth person as a distinct class, renting from the landowner, borrowing from the capitalist, employing laborers, and himself taking the risk and reaping the profit, if such there be. The director may, indeed, enter the service of the capitalist and commute this profit by accepting salary or commissions. Or a corporation, an association owning land and supplying capital, will often assume risk,

employ managers, and under the name of dividends account at once for rent, interest, and profit. But this payment for direction, the remuneration of brains, is almost always to be found, and usually in connection with some one person. Somewhere is the Man, controlling the machine. In the modern organization of industry the quickness of competition, requiring alert personal responsibility, commonly compels such concentration of power as an engineer has over a steam-engine. The conservatism and variant opinion of a "Board" is so ill-fitted to compete, that the larger the organization and the more successful its competition is to be, the more likely is it that some one man will come forward as Managing director.

Profit varies more than any other share. It involves risk; it may become loss. Rent and interest are usually fixed charges, pre-stated; wages are, in general, determined by the general conditions of trade and the labor-market. Profit remains after these three payments have been deducted from product. If product is insufficient to cover these three payments, the director remains responsible for the loss, unless he "fails" to pay, and so shifts it upon one of the other agents in produc-

tion. Whether product exceed or fall below the sum of these three elements of cost — that is, whether it yield profit or loss - depends upon whether this factor of brains directs the labor it employs in such wise as to make product under or over the price obtained. Thus, like rent, profit is only the equivalent of labor saved: like rent, it does not enter into price, being, in fact, the difference between cost and price; and, finally, brains, like land, is a gift of nature, of limited quantity (for this high purpose) and of varying quality. Brains not able to earn more than the ordinary wages of the laborer, correspond to the no-rent land, and are pushed out of the directing into the directed class, as no-rent lands are thrown out of cultivation by the opening up of more productive soil. A tax on profits or incomes has thus the same basis logically as a tax on rent or the productivity of land, arising, like rent, from the saving of labor. Profit is not, economically, a return to capital, but to the brains which can by better organization make one pair of hands do what two did before, and the remuneration is not got by reducing the pay of the first pair. As a matter of fact, the productivity of the first is raised, and the

worker presently gets higher wages, while the second worker finds employment elsewhere in satisfying the increase and growing variety of human wants. There is probably no better investment of the resources of the community than the profits of ten or twenty-five thousand dollars a year paid to superior directors of industry, who increase product far above the amount they get for themselves.

It is a great law of progress by competition, as Mr. Edward Atkinson has shown, that "in any given product, profits diminish, wages increase." Labor gets more and more, the director (and the capitalist) less and less, of the yard of cloth they join to make. The tendency of profit is to become nothing. As one director of industry takes advantage of an improved machine or a labor-saving method, he lowers prices to the lowered scale of cost, so that by increasing his sales he may get greater returns though at a lower profit. His competitors presently "meet him" or "do better." This holds true except when combinations, as in the improvements in making Bessemer steel, deny this saving to the public. Profit is so apt, indeed, to be "undercut" by the general adoption of any one man's improvements, that it has been found necessary to encourage inventors by patent laws which give them the exclusive right to reap the benefit of their brain-service for a certain time. Otherwise they could not afford to do this service. This kind of profit then becomes a definite element of cost until the patent expires, or until an equivalent invention again brings competition into play. It does not, however, add to price, because, like rent, it is the equivalent of labor saved; if the invention had not given this advantage, people would not pay for it.

It is by this fall of prices and lowering of profits that competition tends to drive out of business middle-men and small dealers. Houses whose closer business methods and superior facilities—the result of brains—give them large sales, can afford to make any one sale cheaper than small dealers. This is a hardship to the less able men, but the community gains.

What we know as "hard times," "bad trade," etc., seem to depend upon the directors of industry as affected by the margin of profit. It has lately been pointed out that the consumption of food, the transportation returns of the railways, in

short, the volume of staple business, are not noticeably less in "bad" than in "good" years, and that capital is cheaper in the former. In 1885, as shown by Commissioner Wright's national labor report, five per cent. of our factories, mines, etc., were absolutely idle, and as many more idle for perhaps half the year, leaving probably a million working-men unemployed, at a loss of \$300,000,000 in wages, and much more than that in product. A "better feeling," partly produced by and partly producing improved commercial and industrial conditions, would open many of these shut factories, while such troubles as the railroad strikes of 1886 tend to alarm employers and keep factories closed. The panic of 1893 compelled the railroad companies to lay off 93,000 men. Confidence and courage in the directing class seem to be a chief factor in the prosperity of the community at large.

XXIII.

THE RELATION OF EMPLOYER AND EMPLOYED.

IF you try to account, on blackboard or paper, for the price of a yard of cloth made by a manufacturer who hires land and water-power and borrows capital to build and stock his mill, you will draw, first, a block for rent; then for interest; then for wear and tear of "plant"—that is, the building, machinery, and tools; then for the cotton and other material; last, for labor. You have cost now, but not price. The market price would be determined quite outside of this mill-by the demand for the kind of cloth made, the stock in market, the number and product of competing mills. If above cost, it leaves a block for profit; if it falls permanently below, the goods must be made cheaper, or the employer must stop his works. Now, the two great blocks would be material and wages. If the employer can get material cheaper, he is less likely to resist the human pressure for

an advance of wages; when he is between the upper and the lower millstone of lowering prices and higher or steady material, neither of which are within his control, his only resource is to lessen the total wages.

Here, in fact, is the key to what is commonly called the conflict between labor and capital. In the distribution of product the director of industry, who cannot control rent or reduce interest, struggles constantly to keep down the pay of labor, so that the cost, which he can thus modify, shall be so much less than the price, which is made for him, as to pay him for his head-work and risk. The man of brains, the director, is always trying, also, to make one pair of hands do the work of two. A new machine which does the work of ten men with only five, enables the employer, by reducing the wages-cost, to reap increased profit, until the general use of the improvement brings prices down nearer to the decreased cost. It is on his part a "struggle for existence," for his profit is constantly tending to disappear, as industry progresses and prices lower. "Masters want the greatest profit, we men the highest wages," said a leading trade-unionist of England. It is, therefore.

not true that the "antagonism" is between labor and capital, which helps labor at a lowering rate of interest determined outside the labor market, or land, whose rent represents labor saved; it is between the wage-earner and the profit-earner, the laborer and the director of industry, labor and brains, that the struggle exists by which, in the wise development of nature, the highest gain of both, at the expense of temporary loss, is finally secured. For out of this contest has come the motive to produce those wonders of labor-saving machinery which, in multiplying many fold the production of the world, have given the humblest worker "a better living."

Capital has, however, often given to the director a staying power in this contest which labor lacked, and for a long time the laborer, helpless by himself, had not a fair chance in this contest with the employer, often a great railroad corporation or joint-stock company, protected by favoring legislation, or the controller of the aggregated power of a great private fortune. This led to the organization by the more intelligent working-men of the trades-unions and other labor organizations which have done so much for the interests of labor. The

fact that supply and demand ultimately regulate wages, is illustrated by the rise of the wages of domestic servants, who have no unions, but who have profited the most fully of any laboring class by increased demand. Nevertheless, the trades-unions have been of great service to the community in enabling labor to "hold its own" in many ways. Their effect has been not so much to stop competition, as is commonly assumed, as to give each side in the contest an equal chance. When organizations have made the mistake of ignoring the law of competition, they have gone to pieces, as did the Knights of St. Crispin in Massachusetts some years since.

In each city or centre of industry in the United States almost every trade has now its Union, in which most of the best workmen are associated. These Unions usually join in a central organization for each trade, or, as in the case of the powerful Brotherhood of Locomotive Engineers, a central organization leads to local association. There are also in the large cities general Assemblies or Central Committees of the Unions of all the trades. State Assemblies meet in several States, and a National Labor Congress has several

times been held. The American Federation of Labor is the national organization, thus organized by trades. The Knights of Labor are another organization spread all over-the land, enrolling workingmen without reference to their trade, but accepting individual trades-unions among their many thousand local bodies, under the executive direction of a Grand Master Workman.

The first result of labor association was naturally "strikes," the combined refusal of workingmen to work. This led, as a counter-move on the part of masters, to "lock-outs," or the entire ceasing of employment by the stoppage of mills. This method of settling labor disputes produced enormous losses on both sides. It is a most costly method of bettering wages. Even successful strikes do not often pay, because a strike that lasts one month requires a rise of ten per cent. for the rest of the year to balance the loss of wages. The United States Labor Bureau, for the 131 years, 1881 to June 30, 1894, schedules 14,389 strikes, involving 69,166 establishments and 3,714,231 persons, besides lockouts involving 6067 establishments and 366,690 employés. The largest number of both were in the building trades. The average dura-

tion of the strikes was 25 days, and of the lockouts 47 days. The strikes involved \$163,800,000 loss of wages, an average of \$44 to each worker (of which \$10,000,000 was made up by the labor organization benefits), and \$82,500,000 to employers. The lockouts involved \$26,600,000 loss of wages, or \$73 to each worker (of which \$2,500,000 was made up), and \$12,200,000 to employers. Out of the strikes in these 69,166 establishments 21,480 were for increase and 5,564 against decrease of wages; 10,543 for reduction of hours; 4,787 for increase of wages and reduction of hours; 3,793 sympathetic strikes; 8,508 for recognition of unions or against non-union men. Of the strikes 44 per cent. succeeded, II per cent. partly succeeded, and 44 per cent. failed; of the lockouts 40 per cent. succeeded fully, 9 per cent. partly, and 47 per cent. failed. Success has usually depended on the condition of the market, and seems to have been more frequent in demanding advances than in resisting reductions. In one strike certain employers imported skilled Belgian glass-workers, but found that their labor cost more than the American, and it was as a result of this that the employers gave up. In the great strike of the freight-handlers, June, 1882,

the railway companies hired immigrants as they landed, but found that it took four of them to do one man's work.

The limits of a strike are (I) the rights of individuals, (2) the possibilities before the employer, (3) the public interest and public opinion. A strike which relies upon compelling any other men to cease work should fail, and usually does fail. That is a crime against "the right to labor." A strike which demands from the employer more money than the conditions of the market warrant, or than the price he gets for his goods permits, or which takes from him the direction of his own business, is sure to result ill. Such strikes drive employers out of business and prevent others from coming in. A strike which sets itself against the public interest, by stopping railway trains and so blocking business at large, meets a public sentiment which soon overwhelms it. Public opinion is, after all, the great arbiter, and is almost sure to uphold just strikes, but to defeat strikes when unjust.

The "boycott" is a development from the strike, which consists in refusing to purchase from or hold other relations with the person "boycotted." It

took its name from a Captain Boycott, a landlord in Ireland, who was thus treated in 1880. The great evils of both the strike and the boycott, in the proportions they have lately reached, are the lack of responsibility with which they are used, and the inadequacy of the original wrong to justify the stoppage of production and the great loss of thousands of other working-men, which they now involve. The great Western railway strike of 1886 originated in an attempt to punish a bankrupt road for its action towards one man, and the Chicago riots and blockade of 1894 in an attempt to boycott the Pullman Company; but their spread blocked business at large, deprived factories of their necessary material, and so stopped the wages of thousands of absolutely innocent people. The Milwaukee boycott against the street-car lines in 1895-6 was extended to all who patronized those lines, and nearly paralyzed business in all branches throughout the city.

Arbitration, on the contrary, has proved the successful method of settlement for labor differences. In France, under a law of Napoleon I., this method is provided by law. Over a hundred Conseils des Prud'hommes exist in different cen-

tres, made up of an equal number of employers and working-men, elected each by its own class under the auspices of the Government préfect, with a president and vice-president appointed by the Government. A bureau particulier, of one employer and one working-man, sits every day, and before this disputes must first be brought. If an agreement is not here reached, the case goes to the bureau général, of at least five members, sitting once a week, and its decisions are enforced as a court of law. Over 35,000 cases a year have come before these Conseils, of which (in 1878) 10,000 were withdrawn, 18,000 adjusted by the bureau particulier, 7000 carried on to the bureau général, of which it obtained the withdrawal of 4400 and adjusted over 2200, only 100 being appealed to the Tribunals of Commerce. Laws providing methods of arbitration exist in England and in some of our own States, but in these countries voluntary has taken the place of legal arbitration. A Pennsylvania law authorizes judges of Common Pleas, on the petition of not less than fifty workmen and five employers, naming at least two representatives on each side and an umpire mutually chosen, to license a trade tribunal with legal powers. A

court of arbitration was provided by State law in New York City, with ex-Judge Fancher as arbitrator, for the direct settlement of commercial disputes voluntarily brought before it, but this soon began to take the character of a regular court, with lawyers on either side.

Voluntary arbitration has been most successful in the Nottingham hosiery trade, where the first systematic board was established in 1860, since which time there has not been a strike; in the manufactured iron trade and in the Durham coal trade, in England, and in the Pittsburgh iron trade, since 1865, in America. Where there is only a consultation between two sides, with no provision for enforced agreement, the method is properly called conciliation rather than arbitration; where a third party is called in as arbitrator, whose decision is to be accepted or enforced, it is arbitration proper. The English iron trade presents, perhaps, the best model: the board is composed of one representative from the employers and one of the employés from each works joining. A standing committee, meeting at need, first hears differences and attempts conciliation; if no agreement is reached, the case is heard by the board, which

meets regularly twice a year, or more often if necessary, and calls in an umpire or arbitrator if the board does not agree. The board is fully informed as to the conditions of trade, the manufacturers permitting sworn accountants to examine their books in its behalf. At a semi-annual cost of about \$3000 this board has altogether prevented difficulties, which is the peculiar usefulness of stated meetings, and saved at least a hundred times its cost. The Durham coal arbitration board met at regular intervals, and peacefully adjusted a sliding-scale of wages based on the price of coal at the pit's mouth, which system prevented strikes until 1891. The Pittsburgh system, in this country, has so far been an imperfect one, making yearly agreements which have not altogether prevented strikes, but it is a step forward in a method peculiarly applicable to American industrial conditions.

This modern method of the settlement of labor differences recognizes a human relation between intelligent labor and intelligent direction, based, however, on those laws of Economics which show that labor, as a commodity, is subject to the limitations of the market. The employer, in this case, is willing to lay before the employés the

facts on which his calculations are based, and the employés, in turn, must refrain from any interference with the full direction of his business, which the employer must retain. The mistakes of labor organizations have been twofold, in endeavoring to compel employers to surrender the control of their own business, and in attempting to restrict other men's labor by persecuting individual laborers as "rats" and "scabs," by refusing to work with non-Union men, by limiting the number of apprentices, and, worst of all, by violence against law. This is a combination of the strong against the weak, traitorous and ruinous to the true interests of labor, which public opinion sooner or later defeats. It is repeating the wrongs against labor which labor associations were organized to right; and, by decreasing product, it wreaks its own punishment upon the industrial community. Breaking machines, restricting apprenticeship, shutting out the immigration of "cheap labor," are all measures of restriction which, like usury-laws, offer a seeming and temporary relief at the final expense of those who look to them for benefit. The usefulness of labor associations is not in breaking down the industrial organization, but in enabling 196

labor to "hold its own" in this contest, through arbitration or other peaceful means, by the selfsame help of capital, massed through the petty savings for mutual aid. When, in the course of development by competition, corporations or individual directors abuse their power, and seek to defy natural rights, to control courts or to dominate Legislatures, sooner or later public opinion and the power of the whole people show themselves mightier than they. The key to "the labor conflict," therefore, is in wise steadfastness of general trade organization, putting aside the demagogic promoters of "labor parties," promoting pure politics and alert public opinion, and appealing with confidence, when need comes, to "the people," of which "laborers" themselves form the vast majority.

XXIV.

OF CO-OPERATION.

CO-OPERATION, as opposed to competition, is, properly speaking, an association of Labor to secure profits as well as wages. It is not, as commonly stated, a method of doing without capital, for a co-operative association usually begins by getting capital in small sums from its members, or by borrowing capital at the normal rate of interest. Co-operation may either set itself to the work of supply, dividing the profits of ordinary shops, or to that of production, dividing the profits of manufactories and other producing organizations.

Co-operation in supply, sometimes called distributive co-operation, has been most successful in Great Britain, where, starting from the 28 Rochdale Pioneers of 1844, with their capital of £28, there were in 1891 1459 retail co-operative societies,

with 1,098,000 members, \$55,000,000 share-capital, and \$157,500,000 annual sales, mostly combined into a Co-operative Union, and supporting two great federated wholesale societies, whence they buy about \$60,000,000 of their goods. There were also 100 manufacturing or productive societies, producing \$12,500,000 yearly, and several federated corn-mills. A co-operative insurance company, a banking-house, the *Co-operative News*, and an annual congress are features of this system.

Under the English system of distributive societies or stores, (I) any one can become a member on deposit of Is. 3d. (30 cents) per share, for one or more shares. Sales are always (2) at ordinary market-prices (3) for cash. Stamped tokens are given to each member showing the amount of his purchase, which, at the end of the quarter, entitle him (4) to a pro rata share of dividends from profits. Out of these dividends 3d. (6 cents) a week for each share is retained by the society, to form the working capital, until (5) the £I (\$5) share is paid up, after which members can withdraw all their dividends or let them stay as capital, in which case 5 per cent. interest is paid. At the meetings each member has (6) one vote without regard to

his number of shares. Women are members, and there is a general Women's Guild or league for the spread of co-operation. The general meeting elects the Committee, whose members are sometimes paid fees for each attendance. The committees "find it worth while to pay well" for good store-keepers and employés, as societies, "at the saving of a few shillings or pounds yearly, which makes the difference between a good and an indifferent man, have lost hundreds of pounds, or even been ruined." This is the strongest possible evidence that it pays Labor to pay for Brains or direction. These stores usually reckon on a profit of from 121 to 30 per cent. on different classes of goods, and on 5 to 71 per cent. working expenses. In 30 years they have done about \$2,750,000,000 of business, dividing \$250,000,000 profits, averaging on capital employed about 30 per cent. and on sales about 9 per cent. Working-men's clubs, social gatherings, and entertainments are often associated with the stores. Sixty societies have building departments, aside from the hundreds of building societies proper. The great "stores" in London, such as the "Civil Service Supply Association," the "Army and Navy," etc., whose enormous quarterly sales-catalogues are the best authority for English prices, are rather joint-stock companies than true co-operative associations. The bitter complaint of private shopkeepers in England against the co-operative stores for "taking the profits out of business" shows how impossible it is to put any social improvement into operation without some detriment and much opposition.

On the other hand, productive co-operation has not been notably successful in England. The greatest success has been in France, in M. Godin's Familistère (or family-house) at Guise. This great man, in establishing his iron-works at that place, induced his workmen to contribute regularly to a mutual insurance fund, to which the works made an annual donation. About 1860 he began the Social Palace, now holding over five hundred families. As the fund grew, M. Godin offered to associate its owners with him as partners, but it was not until 1880 that he got his Mutualité Sociale into final business shape as "Godin & Co." Its principle is that "every producing element should participate in the profits, in proportion to the services it has rendered." These are stated as (1) "the

earth and natural resources" (rent and cost of material); (2) "the actual labor of individuals" (wages at a settled schedule, the day's work being ten hours); (3) "capital, or labor economized, the passive agent" (interest). The amount paid to labor as wages proves to be eight times that paid to capital as interest. Finally the (4) directing and administrative force is paid 25 per cent. of the profits (the Director, or "Acting Administrator," M. Godin himself, getting half of this), the other 75 per cent. going to the workers, viz., (a) 68 associates, counting for twice their wages in the allotment; (b) 95 societaries, once and a half their wages; (c) 573 participants, once their wages. The (d) auxiliaries, 158, have a claim only on the mutual insurance; and (e) 258 "interested" have certain claims on the capital. The associates choose a Council of Administration (which is a final arbiter as to individual wages), a Council of Industry, and a Council of the Familistère; the general assembly chooses a Council of Observation. M. Godin is Acting Administrator for life, and chooses the heads of departments, after a written and oral examination; his successor, to be elected by the associates, will also be for life, but subject to suspension by the General Assembly. M. Godin, the associates, and the societaries all live in the Social Palace. The workers soon owned about \$400,000 of the social capital, and will ultimately own the whole \$1,320,000. In one five-year period the returns were over \$1,000,000, of which \$267,000 has gone to M. Godin (\$66,000 as Director, \$201,000 at 5 and 6 per cent. for his capital), and \$756,000 to the workers. There are reserve funds for (I) the assurance of necessities to support life—"the consecration of the right to life"—and a provision for old age; for (2) sickness expenses; for (3) medical care

From these two great examples of English distributive co-operation and French productive co-operation may be learned the usual cause of failure and the key to success in working-men's co-operation. It must recognize differences, and it must pay for brains.

It is not within economic possibilities that the different qualities of labor and brains entering into the combination shall be paid at the same rate. The modern industrial organization demands a directorship, usually by one authoritative person, of an ability which commands a considerable return

of profits or an equivalent commutation of them into salary. Most associations of labor have been unwilling to accept this necessity of leadership or to pay for it, and they have consequently been unable to stem the keen competition which only brains can meet. The trades-unions themselves have too generally fostered the mistake so carefully avoided by M. Godin, in providing that all qualities of labor shall be paid for at the same day-rate.

The system of M. Godin is, in fact, what is more accurately known as *Industrial Partnership*, in which employers retain the direction, but give to employés a share of profits in place of or in addition to wages. The most noteworthy application of this method to ordinary trade conditions is the case of M. Leclaire's house-painting establishment in Paris. The 200 employés, formed into a provident society, constituted one of three partners in the concern. M. Leclaire and his other partner retained \$1200 each as salary and one-half the net profits. The other half went, two-fifths to the provident society, three-fifths to individual workmen, distributed, however, according to M. Leclaire's direction. M. Leclaire found this

method distinctly profitable to him. A similar plan has been attempted in America, but a serious blow was given to its development when, in a general strike, the employés of Brewster & Co., the leading carriage manufacturers of New York, who had adopted this system, left work with the rest. Co-operation can succeed only when it is real—when each side works with the other. Not only Capital but Labor also must learn to respect rights.

Co-operative banking, by mutual loan associations, is now common in all civilized countries. The most famous societies are the Credit-unions or people's banks of Germany, founded by Dr. Schulze-Delitzsch in 1850, which differ from our savingsbanks chiefly in requiring regular small deposits, under penalty of a fine, and in loaning this capital only to depositors. The Co-operative Building and Loan Associations existing in Pennsylvania and other States are on this model, loaning the deposits for the building of houses to those share-holders bidding the highest premium for the use of the money. There are several thousands of these in this country. Our savings-banks, having in 1895 4,777,000 depositors and about \$1,850,-

ooo,ooo deposits, and our mutual insurance companies, are also really co-operative banking associations. Another form of co-operation is the joint-stock companies, in which a number of people put their savings together by buying shares, and divide the profits, after paying expenses of management, in the shape of dividends; these constitute, in fact, the largest co-operative interest in our own and other countries.

The system of co-operative stores, so successful in England, has not made much headway in America, though a few have been carried on by the Knights of St. Crispin and other labor associations. The reason is probably simple. Competition, it has been said, is the best co-operation. The eager competition in America, combined with our cash system, has given us in lowered prices the benefits which the English co-operators get as dividends. But, with our educated labor, there seems to be no reason why co-operative production, rightly organized, should not attain enormous proportions in this country. A Co-operative Iron Foundery was established at Troy, N.Y., in 1866; there has been a successful Co-operative Printing-office in New York City; but the number of such enterprises is yet small. Certain socialistic or communistic societies, like the Mormons, the Shakers, and the Oneida Community, have been large co-operative producers.

XXV.

SOCIALISM AND COMMUNISM.

SOCIALISM means an industrial organization in which society, or the State, takes a controlling interest, and the individual, surrendering more or less his personal relations, looks to the general organization for direction and employment. The word was first used by Ruybaud in 1840, but this method for a more just distribution of wealth and for promoting the happiness of all is as old as Plato's "Republic." Communism is an extreme of socialism, aiming at economic equality or community of goods, so that all social differences shall disappear and "one man be as good as another." Anarchism, or Nihilism, though it develops from communism, becomes the opposite of socialism; it desires "unlimited liberty," providing that every human being should do as he pleases, and only as he pleases, under free contract, perpetually revisable and dissoluble, and it proposes the destruction of all present governments, of which "the best are the worst," and a riotous grab for existing wealth.

Communism and anarchism are the development of a society in which the very rich confront the very poor, in which an extreme division of labor renders workers very dependent on the industrial organization, in which a loose political morality is fostered by corrupt political parties, in which there is the false notion that democracy implies entire equality, and in which there is a general decay of personal morality or religion. Under these conditions a democracy like our own becomes the hotbed of communism, and the care of statesmen must be to prevent these conditions.

The French Revolution, loosening the bonds of society, opened the way in France for the development of the materialistic communism of Babœuf, the sentimental communism of Cabet, whose "Icarian" colony settled Nauvoo, Illinois, after the Mormons left it; the "new Christianity" of Saint Simon and the positivist scheme of his disciple Comté; the socialism of Fourier, with its division into working "phalanxes" of 1500 or 1600 men; the industrial socialism of Louis Blanc, with its

"right to labor" and "social workshops;" and the "mutualism" of Proudhon, who declared that "property is robbery," but upheld individual possession of the means of labor, such as land and tools. These French schemes, however, all came to naught.

In Germany, on the contrary, socialism has had direct influence in the conduct of affairs. The "Social Democracy," of which Rodbertus was the philosophical founder, and whose Bible is the "Capital" of Karl Marx, furnished the principles of the International Working-men's Association, which held its first meeting in London in 1864, and proclaimed the oneness of the interests of labor in all countries. The anarchic "International" branched off from this in 1872, rejecting the leadership of Marx, and has since become an organized threat to all governments. Marx's central idea was that capital hired labor at its value-in-exchange, or market-price as a commodity, and got from it in product its value-in-use, pocketing the difference as profit. He would reduce all values to a common unit of average labor-time, and require that each man should get the entire value of his own labor.

Lasalle, the central figure of German socialism, became the propagandist of this doctrine among working-men, urging the abolition of wages under a system of productive co-operation like Louis Blanc's, for which the Government should furnish capital by a loan of \$75,000,000. He started, in 1863, the "Universal German Laborers' Union," and from this grew the Social Democratic political party, which has now several representatives in the German Reichstag or Parliament. It demands that the State shall exist for the laborers, land and capital becoming collective property, and production being carried on co-operatively. Many of the details of its programme were so practically beneficial, however, that it gained much hold among the people, until Bismarck, endeavoring, on the one hand, to repress it by his socialist laws, strove to meet it on the other by such plans as his State insurance for laborers. This requires a certain part of wages to be put aside as insurance moneys for laborers hurt or killed at their work, to which a certain sum is added by Government, which controls the insurance organization. The system is the same as that of the Baltimore and Ohio Railroad Company in this country.

In addition to the Social Democrats, there are in Germany the Professorial Socialists, or Socialists of the Chair, a number of professors of political economy, whose leader, Wagner, is the economic counsellor of Bismarck, and who uphold State action in behalf of laborers by means of a strongly paternal government; and the Christian Socialists, in the Catholic Church led by Bishop Baron von Ketteler, and in the Protestant Church by pastors Todt and Stöcker, who look upon religion as the motive, and the guardianship of the Church as the method, of the common betterment. The Christian Socialists were represented also in France by the eloquent De Lamennais, and in England by the group including Kingsley, Maurice, and Hughes, who had shown their practical helpfulness by an attempt at co-operative societies about 1850, which were afterwards merged in the system started later by the Rochdale pioneers.

Socialism in America has taken definite shape chiefly in the communities springing from a religious or philanthropic germ. The Mormon state is essentially socialistic, and the villages of the Shakers, at Lebanon, New York, and elsewhere, are communistic, requiring a surrender of personal

property on the part of all joining the sect. There has been much socialistic and communistic agitation in the great cities, where dangerous seed has been sown among the working-men's associations by demagogues, but for the most part our free democracy has declined to accept communistic principles.

There is, however, a considerable development of the socialistic method in the adoption by modern governments of the business of the post-office, telegraphs, and railways, in most cases as a monopoly forbidding rivalry by private enterprise. All civilized countries treat the post-office as Government business, and this has developed, indeed, in the International Postal Union, into an international organization. To this Great Britain adds the telegraph system, and Germany and other European countries the entire or partial ownership and control of railways. Germany proposes now, also, to make the manufacture of spirits as well as of tobacco a Government monopoly, though this is only as a means of revenue. City government, involving the supply of water, and in some cases gas, also involves the socialistic method. The extreme laissez faire doctrine as to Government functions has been practically modified into the *dictum* that Government should not undertake what can be as well done by private enterprise, and this test is accepted by most economists. This is a question of practice, limiting the application of socialist method by the facts of the individual case. Government, taking capital from the people by means of taxes, must make sure that these are used profitably for *all*.

But this adoption of socialistic or co-operative method by Government does not imply acceptance of the socialistic principle that each man has the right to look to the State for his means of livelihood. The distinction is vital, for this theory is destructive of the individual responsibility on which alone a free democracy can be based. Socialism, in this sense, would be indeed a new slavery, reducing "each of us" to be the subject of "all of us," a sovereign master indefinite and irresponsible, under whose reign of terror our Government would fall as Rome fell and as France fell.

XXVI.

TAXATION AND NATIONAL DEBT.

IT has been said that there are two things certain - death and taxes. Taxes are that part of the wealth of each citizen taken by Government to be used for the benefit of all. Government, like all other service, costs money. This money comes out of the pockets of the people: there is no other place to get it. It may come by direct taxation, in which each citizen pays so much directly to the tax-collector; or by indirect taxation, such as a tax on goods bought and sold, in which the tax is added to the price and is finally paid by the man who finally uses the goods. Some one has called these the "straight" and "crooked" methods of taxation. In either case the money comes from the earnings or savings, the product or property, of the citizens; each man has less than he would have had if he had not paid the tax or the increased price.

Unless a Government has public lands or other property to sell or rent, or unless it takes away business from its own citizens by competing with them or monopolizing certain kinds of business, taxes are the only means of support for a Government. For if it spends more than it gets, and runs into debt by issuing promises-to-pay called bonds, sooner or later this discounting the future must be paid in higher taxes, unless by "repudiating" its bonds it cheats those who have advanced it money. Taxes are thus "the life-blood of a nation;" and as self-preservation is the first law of life, Government has the right to take all the wealth of all its citizens, if that be necessary. Practically, too high taxes lead people to revolt, as in our Revolution, or to dodge, as when many rich men moved from Boston to Nahant, or to cheat, as when the United States found that it got more money from a 50 cent tax per gallon on whiskey than from a \$2 tax.

Taxes used to be paid in kind—one sheep out of ten. To this day a countryman can pay his road-tax by so many days' labor on the roads, or (it is said) a merchant the 50 per cent. duty on silk by giving up one yard for every two he keeps. But, for the most part, taxes are "assessed" as so

much percentage on a money "valuation" of property; taxation, from the Latin taxare, to value, means, indeed, a valuing or counting. After the legislature or the town-meeting has fixed the amount to be raised, assessors or appraisers, appointed by the authorities, fix this valuation, or "doom" the property. In Boston they meet in what is called the "dooming chamber," and the famous Domesday. Book was the first tax-roll and census of England. This valuation is sometimes the "fair market value" of property, which is the rule at the custom-house and in some States and cities: sometimes a half or a third of this, as in other States and cities. The mere rate of taxation thus means little: 2 per cent. on a valuation of a third is a lower tax and brings less money than I per cent. on a full valuation.

In fact, a tax is not good or bad simply as the rate is low or high, but according to how the money is raised or used. The productiveness of a tax is not its first consideration. A heavy tax may be far less injurious to a country than the blight which may result from the manner of taxing it—a blight which ruins the harvest which it cannot gather. Good government is the

best of investments; bad public service is the worst of waste. A community of high civilization pays large taxes, and profits by them; poor communities starve without them. In most cities the highest tax paid is the charge for water, but a citizen who pays \$10 a year saves much more in the avoidance of the cost of keeping his well clean, of buckets, and of labor in fetching and carrying. A good sewerage system is costly, but it saves a great deal besides doctors' bills. Good roads and streets save more than their cost in time, wagons, and horseflesh. But a tax must justify itself by its increase of product, through greater safety, comfort, or facility. It must give more than it takes, and each person must get his money's worth of good. Taxation is robbery when it is used otherwise than for the benefit of all. The Tweed Ring in New York, capturing the city government and the taxing power, simply spoiled the people in general under forms of law, instead of picking their pockets one by one in the street. So when Topeka, Kansas, undertook to give \$100,000 to a manufacturing company to locate its shops in that city, the United States Supreme Court declared that taxation "to aid private enterprises and build up private fortunes is none the less a robbery. There can be no lawful tax which is not laid for public purposes." Those who oppose tariff taxes intended to build up particular industries claim that these are a similar robbery of the people taxed by the increase of price. The exemption of one set of persons or kind of goods, while other competing persons or goods are taxed, also gives one an advantage at the expense of others.

The purposes for which it is generally considered that Government may properly levy taxes include the actual cost of legislation and executive work, covering public buildings as well as salaries and expenses; the enforcement of justice by courts, prisons, and police; the common defence by army and navy; public works, such as sewerage and water systems; education by means of public-schools; enterprises for the common good beyond the scope of private organization, such as the postal system and exploring expeditions; and, within close limits, the care of the defective and destitute classes.

The people of the United States paid in the census year 1890 \$1,040,000,000 for their government, being from 7 to 8 per cent. of their annual

product, or 16 per cent. of their total property -about \$16 for each person or \$46 for each worker. Of this more than half was direct taxation for State and local purposes: according to the census of 1890, \$116,000,000 State, \$133,-000,000 county, \$329,000,000 city and local, in all \$578,000,000 on a valuation of \$25,500,000,000, of which \$19,000,000,000 was real and \$6,500,000,000 personal property (the last being absurdly low, because of the difficulty of finding out about it). The purposes for which city taxes are used were illustrated by an analysis of New England city debts, which showed 20 per cent. for water-works, 15 per cent. for streets and bridges, 6 per cent. for parks and public places, 3\frac{3}{4} per cent. for public buildings, 3 per cent for fire departments, 3 per cent. for sewers, 28½ per cent. for refunding old debt, and 10 per cent. for railroad and other aid. The nominal tax rate of cities ranges from 80 cents to \$5.76, of States from 10 cents to 90 cents, per \$100. The National Government in 1894-5 raised \$152,158,000 by customs and \$143,421,000 by internal revenue tax, besides \$76,983,000 postal revenue, and \$17,800,000 miscellaneous receipts-\$300,-373,000 in all. The national debt, the cost of our

war, which in 1866 reached over \$2,750,000,000, is now under \$1,126,000,000 (net), costing \$31,000,000 interest, and the State and local debts (after deducting from the gross debt the "sinking funds," i.e., moneys set apart to pay debts) were by the census \$1,135,000,000, costing about \$60,000,000 interest, in all about \$2,260,000,000, costing about \$91,000,-000 interest yearly. This is a debt of over \$32 for every man, woman, and child, involving a tax for interest of over \$4 yearly on every earner in the United States. It used to be said that "a national debt is a national blessing;" but this meant only that our war for the Union was worth in lives and money all it cost. Debt is in itself not a blessing but a curse. Taxes and debt are good or evil according to what we gain by them. Europe is burdened by debts of over \$22,000,000,000, involving a yearly tax of over \$1,000,000,000 on her hardworked people, which represents chiefly the waste of needless war.

Adam Smith laid down four famous canons of taxation: that each citizen should pay in proportion to his abilities, *i.e.*, on the property enjoying or claiming the protection of the taxing power; that a tax should be certain and not arbitrary, the

time and manner of payment and the amount plain to all; that it should be collected when it can be easiest and as it can be easiest paid; that it should take out and keep out of the pockets of the people as little as possible over what it brings into the treasury. That is, a tax should be laid equitably and definitely, and collected with convenience and economy. The difficulty in these rules lies in their application—whether as to methods of taxation, direct or indirect, or as to subjects of taxation, which may be "persons, business, or property."

A tax on persons is called a poll (i.e., head) tax; this is a form of direct tax that has almost gone out of use except for keeping some kind of count; in Massachusetts, until lately, and in other States, no one could vote until he had paid his yearly polltax of \$2. A tax on business may be a license or occupation tax, such as a liquor-dealer or hackdriver pays before he can do business—chiefly used now to regulate callings partly public in their nature; or a tax on evidences of transactions, as by "stamps" on a contract; or a tax on the amount of business, as on sales. Of this sort also are tariff and excise taxes, though they seem to be

levied on property. A tariff (from the Spanish tarifa, a list of rates) is a schedule of taxes, often called duties, collected at the "custom-houses," on goods imported from other countries. In "a tariff for revenue only" duties are so low that goods are still brought in and pay revenue to the Government; in "a protective tariff" duties are so high that foreign goods are kept out, so that manufacturers may get higher prices for goods made at home, which increase the people pay, though the Government gets no revenue. Excise or "internal revenue" taxes are those collected on goods produced at home, as on liquors and tobacco. These are all indirect taxes, adding to price. They are the least disliked, simply because they are not seen, since less than 300,000, or a half of one per cent., of our people seem to pay them; but they are the most costly, requiring great numbers to collect them, and the most wasteful, since each seller not only adds them in his price but adds also a profit on the tax, until the final consumer may pay on his blanket twice the actual duty.

Legacy or succession taxes, levied in England, are taxes on property received by bequest, usually heavier according to distance of relationship. In-

come taxes are another tax on property—a proportion of the yearly earnings of each person. When the lower incomes are exempted—as during our war \$600, and afterwards \$2000 - this tax is one on superior power, i.e., brains, or capital, exempting labor. These are hard taxes to levy justly and to collect fully—people do not tell the whole truth, and object to having their affairs "spied out;" also many cannot really fix their income in money—so that they were given up soon after the war. Taxes on property are accordingly chiefly direct taxes on personal property (movables) and real property (buildings and land). The first are so hard to fix that they become a farce; while the wealth of the country has been steadily increasing, the valuation of personal property shows a falling off. Thus while the total valuation of New York City is over \$2,106,000,000, personal property under \$375,000,000 is all that is found to tax. Under the personal property tax, also, the mistake is often made of taxing evidences of debt as well as wealth; of taxing a mortgage of \$5000 in addition to the \$10,000 house it is on, though there is in all only \$10,000 of property to tax. Taxes on real property are thus becoming

the main element of Government revenue, since land and houses cannot run away or hide, and their value is easily determined.

The old system of taxation was to lay a tax on everything—"infinitesimal taxation," and, as Colbert put the "art of taxation," to "so pluck the goose [i.e., the people] as to get the most feathers with the least squealing." A self-governing people ought, on the contrary, to have the simplest possible system of taxation, so that they may look taxes squarely in the face and make sure that they get the worth of each cent they pay. The New York State Commission of 1870, in the famous reports of Mr. Wells, recommended, accordingly, that State taxes be confined to (1) a tax on corporations having a monopoly, as gas companies, which cannot remove; (2) a tax on land and buildings; (3) a tax based on a valuation of three times the rental value of the house in which a man lives, in lieu of tax on personal property, on the ground that a man's wealth and income are fairly tested by the cost of his residence. Other economists, among them John Stuart Mill, favor the laying of taxes chiefly upon land, especially on the valuation of unimproved land in the neighborhood. This

would prevent the accumulation of vast estates of land held unused "to wait a rise," and would throw the burden of taxation upon city landholders, whose land has risen in value chiefly by the "unearned increment" from the progress of society, while relieving farmers who by improving their land are doing service to society. Mr. Henry George's proposed system carries the idea of land taxation still further; he would lay a tax equal to rent (using the word in the economic sense), and thus take the whole of the "unearned increment" for public purposes, leaving to the landholder only the earnings of his labor, capital, and brains.

The taxing power of a Government does not go beyond its own boundaries. A country, or State, or city which overtaxes or misuses taxes, drives wealth and population outside its boundaries beyond its taxing power, and so increases the burden on each person who remains. As it is found that taxation bears not so much upon the value of business done as upon the profit made, a very slight change will drive manufactories, for instance, from one town or State to some other town or State where the tax conditions may be more favor-

able. "Never tax anything," says a modern authority, "that would be of value to your State, that could or would run away, or that could and would come to you." The American people will probably come, within a generation, to the simplest form of taxation, levying a single tax on land, at its fixed place, not where the owner lives, by which probably the national as well as State and local taxes will be collected on one system by the same tax-gatherers, half-yearly or quarterly, and each tax-payer will know all he pays and how it is spent.

Legislation in the form of taxation has always a strong indirect effect in directing consumption from or into certain channels, and the objects and methods of taxation must always be brought to this economic test. The thing which is taxed, or the form of industry which is taxed, is put at a disadvantage beside that which is not taxed, with the result of increasing price and so decreasing demand. The statesman whose sole purpose is to raise revenue cannot overlook the fact that the method and subject of taxation greatly influence the every-day life of his people, especially since the cost of government is sometimes ten per cent.

of all expenses. A tax on liquor has been a favorite tax because it increases the cost of drinking; on the other hand, it has a tendency to promote the adulteration of liquors, and so to poison those who will drink anyway. There is a popular cry to tax luxuries, but it is always difficult to draw the line between necessaries and luxuries; thus people are divided as to whether tea and coffee ought to be taxed or not taxed.

Taxes, as an item of distribution in business reckonings, belong in part to wages, so far as the Government is preventive and is paid for public service as a watchman is paid, and in part to interest, so far as the Government is constructive and furnishes roads, bridges, and other capitalist elements in production. A constructive Government easily becomes a paternal Government, fathering all sorts of enterprises. The tendency of the exercise of the taxing power is, in fact, to make a Government paternal. The comparative usefulness of preventive and paternal functions in Government is rather outside of Economics, but it may be noted that this seems to vary with the development of a people: a Government which takes upon itself wide constructive work being the most useful in communities in which, as in India, the body of the people lack mobility, organizing capacity, and foresight, and look to Government to supply this lack of mastership, and least useful in communities which have these qualities in high degree, are their own leaders, and are self-regulating. A paternal Government is always in danger of making wholesale mistakes, and doing harm instead of good accordingly.

XXVII.

THE USING OF WEALTH—CONSUMPTION.

THE purpose of wealth is use. Men produce solely to consume. Consumption, the final aim of production and exchange, though economists are but just beginning to study it, is in one sense the most practical department of all; for, more than anything else, this is within human control and direction. Our desires vary with the kind and strength of the motives we cultivate in ourselves. The savage, for instance, desires great quantities of food, and a big fire to keep him warm: a few things, in large quantities, satisfy him. As civilization advances, desires increase in variety, and begin to look rather to quality than to quantity. The civilized man eats less of any one thing, but his appetite is developed to desire variety of food; and instead of using great quantities of fuel to warm him, he dresses more warmly, builds a better house, and so needs less instead of more fuel. This "law of variety" of desires gives the key to economic progress. We always want more than we can get. Human desires multiply beyond the means of satisfying them. There cannot be too much in the total, though there may be more at one time or place than is wanted of any one thing.

The great fact here is that supply is controlled by demand rather than demand by supply. When we go to a store we buy what we want, rather than what the store-keeper wants to sell us. Statutes cannot control demand; "sumptuary laws," telling men how they shall or shall not dress or eat, have always failed. But one thing can—an intelligent sense of moral and economic laws, moulding public opinion to a higher standard of life. There is no factor in the world so strong; for it holds with the savage as with the civilized man, and with the pagan as with the Christian. Wise legislation may help; but laws against public opinion prove only a dead letter or a hinderance. It is found, indeed, that there is a natural order or scale along which men seek to gratify desires. Their first requisite, after air, is food; next clothing and

housing; next ornament and amusement; and, later, food of the mind. With civilization these wants become infinitely varied, and the higher wants control more and more. The important thing, therefore, in national as in personal development is that people should be trained by their preachers, their teachers, their newspapers, and their statesmen to desire good things and to avoid waste. "Tell me what you like"—what you want—says Mr. Ruskin, writing of Economics, "and I'll tell you what you are."

The great preventable wastes in this country are from fire, from liquor, crime, pauperism—these three closely connected; from waste of food, and from the waste of unemployed labor under inadequate industrial conditions. The annual fire loss of the country is now about \$150,000,000 per year (of which the \$90,000,000 paid by insurance companies is none the less loss), the cost of sustaining insurance companies is over \$53,000,000, the cost of fire departments is perhaps \$40,000,000—in all nearly \$250,000,000 per year, or over one dollar and a half in each hundred dollars' worth produced, or about 12 to 15 per cent. on the possible savings in a prosperous year. Much of this could be saved by

common-sense construction, common skill in prevention of loss, and common care in the use of property, which have already resulted, as applied through mutual insurance inspections, in reducing greatly the proportion of fire loss to property insured. The "drink-bill" of this country is figured by Mr. F. N. Barrett at over \$1,000,000,000 yearly, including over 85,000,000 gallons of spirits, aggregating nearly \$400,000,000; over 1,000,000,000 gallons of beer, aggregating \$500,000,000; and 40,-000,000 gallons of wine, aggregating \$100,000,000. This drink-bill is nearly as much as all the taxes, and absorbs from 7 to 10 per cent. of our exchangeable product. Our loss by the 82,329 criminals reported in jail in 1890, and the many more out of jail, is incalculable. Mr. Dugdale estimated that the actual loss, and the potential loss from idleness and early death, in the case of "The Jukes" criminal family alone, numbering 1200 people, was in 75 years \$1,258,000. The 73,044 paupers reported in almshouses form but a small part of the pauper burden. Mr. Edward Atkinson estimates the consumption of food (excluding liquors) in this country at a minimum of \$6,600,000,000. Probably 10 per cent. is a low estimate of food waste, i. e., we

could save by wiser living over \$660,000,000 per year. Due precautions against fire, the growth of temperance, the reduction of crime and pauperism, and the wiser use of food, could add to our national wealth each year much more than the present amount of our total annual savings. In addition to all this, better industrial organization will save the enormous loss by unemployed labor.

Of late years economists have begun to give much attention to the savings and spendings of the people. Dr. Engel, a German economist, has shown that the smaller a man's income the larger is the proportion of it he spends for food; while clothing remains nearly, and rent, fuel, and light almost exactly, the same proportion with different incomes. Thus, as a man's income increases, he spends more and more in proportion for the higher "sundry expenses," such as education, worship, legal protection, health preservation, and recreation. In Germany, Dr. Engel found, working-men who earn \$225 to \$300 yearly, the middle-class earning \$450 to \$600, and the well-to-do having \$750 to \$1100 incomes, all paid about 12 per cent. for lodging and 5 per cent. for fire and light; the working-men 16 and the others 18 per cent. for

clothing; while for subsistence the working-man had to use 62 per cent., leaving only 5 per cent. for higher needs; the middle-class spent 55, leaving 10 per cent.; and the well-to-do only 50, leaving 15 per cent. for "sundries" and savings. The statistics of Great Britain show that a working-man's family earning \$500 (out of which they save 1.76 per cent.) spend for rent 13\frac{1}{2} per cent., for fuel 3\frac{1}{2}, for clothing 18, for subsistence 511, for sundries $13\frac{1}{9}$ per cent. of the total out-go. The average of the "working-men's budgets" collected in Massachusetts by its Bureau of Labor Statistics show on a family income of \$750 (of which 6.11 per cent. is saved) a percentage for rent of 20, fuel $4\frac{1}{2}$, clothing 16, subsistence 49, sundries 11 per cent. of the total out-go.

Out of our annual product as a nation, of \$14,-000,000,000 (in 1880), we consumed as food and drink, according to Mr. Atkinson, about \$6,600,000,000, nearly half. The rentals we paid each other (including payment for buildings) would probably reach \$1,800,000,000, with an additional \$500,000,000 for fuel and light. Our clothing costs about \$1,300,000,000. We pay about \$1,050,000,000 in taxes, part of which goes to such items as water-

supply, education, etc. For education itself we pay considerably above \$180,000,000 yearly; expenditure for religious purposes covers many millions more. Our annual savings are estimated variously at from \$1,000,000,000 to \$1,400,000,000. In the present state of economic statistics, however, these figures are little more than broad guesses.

We produce to consume, but it is also true that we consume to produce. We consume ore to produce "pig-iron," and "pig" to make bar-iron or steel, and this to produce machinery, and this we wear out in making other things, as ploughs to raise wheat. We consume wheat to produce flour, this to make bread, this to make muscle, this to dig ore perhaps. Wealth used as capital gives us productive consumption; when we use product sim-, ply to gratify our desires, it is non-productive consumption. But it is not easy to draw a clear line; bread may be food and cake luxury, but a bun is either or both. So, also, we may speak of destructive consumption, in which the article concerned is destroyed by use, as food or fuel, and what we may call conserving consumption, in which the article ministers to desire again and again, as a house or a tool which does not wear out for a long time, or is without any loss by use, as a book or a picture.

There are two opposite notions of consumption equally untrue—that spending is in itself desirable, and that saving is in itself desirable. Some think that to spend a great deal of money, as in a Vanderbilt ball at which the flowers alone cost \$4000, is a great good, because it "makes trade." They forget that waste is not wealth-making; war, fire, the sinking of a ship, also "make trade," because by destroying existing capital they increase demand. The wealth thus wasted would, more wisely used, furnish capital to many more people in creating more wealth. On the other hand, hoarding is not wealth-making; wealth hoarded is withdrawn from capital without doing any one good. The truth lies between: that man, or that nation, is best off which consumes most in the higher part of the scale; which keeps its consumption below its production, so that it accumulates wealth; which keeps productive consumption high in proportion to non-productive consumption. It is not how much is consumed, but how it is consumed, that tells.

All producers are consumers; but certain classes

of consumers are often referred to non-productive consumption—as domestic servants and professional men. But most human labor, unless misdirected, is actually productive; for a domestic servant saves the force of a person of greater productivity, a doctor keeps him in working order, a lawyer helps to make it possible to transact business with surety, a clergyman promotes morality and thus renders it easier to exchange justly and profitably. There nevertheless remains a certain proportion of service and of corresponding payment in most of these cases, which must truly be referred to non-productive consumption.

The final question of consumption is whether population, which can increase like compound interest, will in the increased demand for food outrun the supply, since food is subject to the law of diminishing returns. Malthus points out that the lowest population are less self-restrained and breed most freely. To the present time, however, each generation since Malthus has had more food instead of less than that preceding, because of increased production. This problem of population, food, and land, like that of the exhaustion of the coal beds, is one of the far future; and, as other natural products like oil, or forces like electricity and direct solar energy, are beginning to help out coal, so many other elements temper this fear for the future. The valleys are always being replenished by the disintegration of the hills, as well as by the gifts of the rain and the air; but as to when the earth becomes one level and the sun grows cold, who shall say, or who can profitably think? The experience of the world so far has been that man has continually bettered himself, by discovering new methods of utilizing the forces of nature, which gives us reason to believe that the human race, as it learns to use the earth at its best, will have more food instead of less.

XXVIII.

THE EARLY HISTORY AND LITERATURE OF ECONOMICS.

THE study of economic history and literature is useful in three ways—to show us the development of thought, to give us the facts from which to obtain or verify economic laws, to enable us to follow or to avoid the courses which have made other nations great or brought them to their ruin. The scientific study of Economics as a systematic body of natural law is essentially modern, dating scarcely beyond the sixteenth century. But economic laws, institutions, and facts have existed from the beginning of human history. The Bible, the Babylonian bricks, and the writings of Herodotus, "the father of history," give us the earliest references to trade, weights and measures, coinage, taxation, and other economic institutions. The Jews have always been traders. Solomon was a great merchant king. Their government revenue

came from tithes. The Babylonians sold, leased, and mortgaged houses, loaned money at interest, worked land on shares, coined gold and silver at a fixed ratio of 1 to 13½, and, according to Herodotus, "were the first to sell goods at retail." Damascus means "a seat of trade;" Tyre was a great centre of commerce (Ezekiel xxvii.) and of colonization.*

The ancient States were founded on slavery; Aristotle declared that "nature creates some men for liberty and others for slavery." In the "democracy" of Athens three-fourths of the population

^{*} Blanqui's "History of Political Economy in Europe," written in French in 1837, and translated from the edition of 1842, is an informing study of ancient and mediæval economic institutions and of later economic science, up to 1842, but not very systematic or satisfactory. Kautz's more comprehensive German history (1860) is not translated. Professor Perry prefaces his larger "Political Economy" (18th ed., 1883) with a useful general view of early economic methods and of schools of economists. On the literature of the subject, Cossa's "Guide to the Study of Political Economy," translated from the Italian (1880), is the best authority; an excellent popular summary, since 1500 and up to date, prefaces Professor Laughlin's abridgment (1884) of the "Principles of Political Economy" of John Stuart Mill. See also the classified and annotated "Reader's Guide" of the Society for Political Education.

were non-voting slaves, who were the laborers and mechanics. The Greeks, accordingly, despised industry and shopkeeping, and honored agriculture and commerce. The Athenians laid import duties of 2 per cent. at home, or 5 per cent. at the ports of subject-allies, but their revenue was chiefly from tributes, from confiscations, and from fines. Interest was left to take care of itself. They made public loans; in time of peace they saved the revenues for war. Each citizen felt himself a shareholder in the State; a relentless public opinion punished public debtors and betrayers of trust. Athens broke down under luxury, slavery, demagogic truckling, public patronage, and communism: her citizens, unused to work, began to rely on State aid, to banish rich men for the sake of the confiscations, and to clamor for distribution of public funds.

Several Greek writers treated economic subjects, though they did not reach down to the recognition of economic laws. Xenophon wrote a dialogue called "The Economist," in which he speaks of Economics as a study by itself, and a tract on the revenues of Athens, proposing to increase them by encouraging immigration, honoring mer-

chants, expediting commercial trials, and establishing a Council of Peace. He had correct notions of wealth—"Wealth is only that which can be useful to us;" and of the State he said, "One has very long arms when he has those of an entire people." Plato discusses money, trade, and the division of labor in his ideal "Republic." Aristotle, the disciple of Plato and the teacher of Alexander the Great, is the first great systematic writer on Economics, in his "Politics" (founded on his collection of the constitutions of 158 States), "Ethics," and "Chrematistics" (or science of property), the fourth book of which deals with political economy, "the administration of free States" or cities. The book known as his "Economics" was, however, compiled in a later century. He founded his system on the Greek belief in slavery, but points out that "the middle-class is the surest basis of a good social organization," and warns against social struggles in States which have "only poor and rich, that is, extremes and no means," in which the conqueror "takes good care not to establish a constitution on principles of equal rights, [but] regards the government as the prize of victory, [and] gives it the livery of his party." He thought "the

best nation is a nation of farmers," and despised mechanics and tradesmen; but he points out that administrators are also wealth-producers and "the very soul of the city." Property, he says, has two uses, one natural, the other artificial or industrial, as an object of exchange—almost the exact distinction of Adam Smith between value in use and value in exchange. He shows also the true nature of money, "an intermediary commodity designed to facilitate an exchange of two other commodities."

Rome began, probably, as a seat of trade for the Tiber valley, whose people were herdsmen and peasant proprietors working small farms. A hardy race, fit for war, the Romans soon turned from the arts of peace and founded a military State, based industrially on slavery, and enslaving conquered nations. War developed great administrative powers, until at last the superb despotism of the empire came into being, and Rome, the city, sucked the life-blood of the provinces. The Romans praised agriculture, but preferred war; they despised shops and ships, leaving commerce chiefly to conquered nations of sailors. Industry and commerce, said Cicero, "are to be regarded as dis-

graceful," though on a large scale "they must not be altogether condemned." Slaves, treated worse than beasts and contracted for in droves, did even such work as architecture and business management; though they were commonly overseen by "freedmen," who were attached to their slaveowning patrons as "clients." Caste ruled the social organization; Augustus sentenced a senator to death for stooping to direct a workshop. Conquered nations, like Carthage, furnished the commerce of Rome. Money, contrary to the Greek doctrine, was considered the chief wealth, and its export was prohibited. Interest was accordingly high, discount reaching in known cases 70 per cent., while 12 per cent. was thought low. Revenue, reaching \$200,000,000, came from import taxes chiefly 2½ per cent. on luxuries, but varying in different provinces—and export taxes; from a landtax of a tithe of grain and a fifth of other agricultural products, and from the scriptura on pastures and public woods. A tax of five per cent. on merchandise at public sale, a like tax on inheritances, and other special taxes, as Caligula's on food, were laid in later days. These and the tribute-moneys of conquered nations, were farmed out to contractors, who collected them through slaves and freedmen. Great roads were built to the provinces, but for war and tribute, not for trade. Speculation, indeed, took the place of trade; the rich became richer and the poor poorer. The citizens who did not like work had to be fed; "these dogs," said one emperor, "cease to bark only when they have a full stomach." Laws were passed fixing the price of grain, granting five bushels each month to needy citizens, and scaling debts. Famines led to public granaries, the "sacred fleet" bringing to Rome the crops of Sicily and Egypt was a Government project, and bounties were offered on importations of grain. The small farms at home could no longer compete; creditors swallowed up these farms; and their "broad-farms wrecked Italy," says Pliny. Thus Rome, defying economic laws, came to political suicide.

In this state of things economic writers were not wanted: moralists, like Juvenal the satirist and Seneca the Stoic, set themselves in vain to stem the current of the times, and Cato and "the agriculturists" to bring their countrymen back to rural arts, but the economic literature of Rome is to be found chiefly in Cicero and Pliny, who con-

tributed little, however, to the progress of the science. In the *Corpus juris*, or body of the laws, and in the Institutes of Justinian, are to be found, nevertheless, many sound economic statements which are at the foundation of our own law, especially the recognition of rights and usufructs as property, under a legal distinction between corporeal and incorporeal things of value.

Christianity brought into Economics a new force. In proclaiming the brotherhood of man, it doomed slavery and sowed the seed of an economic revolution. The early Christians freed their slaves, bought the liberty of slave-converts, and held wealth as a trust for their fellow-Christians. Vet little progress was made in Economics until the Dark Ages gave way to the Renascence. Aristotle was revived by the schoolmen, and theologians such as St. Thomas Aquinas discussed money and kindred themes. Feudalism and serfage bound men to lords and the land. The general drift of nations was in favor of "the mercantile system" of discouraging the export of money and the import of goods, so that "the balance of trade" might be favorable. France, from 1300 on, was its special apostle. The Jews of the Middle Ages—sav-

ing, banking, trading, and lending—were the commercial missionaries of those times, but they were hounded as common prey throughout Christian nations. With the discovery of America, the invention of printing, and the Reformation, came also the dawn of economic freedom. The Italian cities and the Hanse towns of Germany, commercial and banking centres, developed commerce, and the German guilds, nourishing the industrial arts, produced a race of burghers stout to resist and break away from the feudal despotism. One of the chief episodes of the Reformation was the controversy as to usury, in which Luther held to the Catholic theory that a loan was essentially gratuitous, while Calvin declared boldly for free interest and against usury laws. The theory of money was indeed the absorbing question of economic discussion up to modern times, but throughout this middle period the germs of the modern industrial development were quietly growing.

XXIX.

THE MODERN HISTORY AND LITERATURE OF ECONOMICS.

MODERN Economics may be said to have begun in France. Sully, the finance minister of Henry IV., developed on the mercantile system a general plan of administration, and two years after his retirement Montchrétien published at Rouen, in 1613, the first systematized general "Political Economy." Sully reduced taxation, to promote prosperity and increase revenue, and by this course paid off the national debt of \$66,000,000 in a few years. He fostered agriculture, improved roads, dug canals, and provided means of transport. But he opposed manufacture, passed sumptuary laws, and discouraged trade with other nations. Colbert, the minister of Louis XIV., followed Sully in reducing and simplifying imposts, that the public treasury might prosper with private prosperity;

in reforming the public business, in promoting agriculture and internal transportation, and in assuring security to trade. But he also glorified manufacture and commerce, and in his eagerness to serve the former devised the first protective tariff of 1667 and became the pioneer of the protective system. The Paris merchants opposed his plan, pointing out that "excessive taxes cause a loss on the whole of what is gained on the parts;" that workmen cannot profit "without the help of foreigners, who furnish all the fine wools, for we have only coarse ones," as well as other raw materials; and that "foreigners will not fail to retaliate," so that "our workmen will be without employment." The Dutch did retaliate; war followed, agriculture suffered. After Colbert's death tax abuses again multiplied "till," said Vauban, "a tenth of France were beggared, five-tenths were scarcely better off, three-tenths were straitened; of the remainder, a hundred thousand families, not ten thousand were at ease."

At this time arose the first great school of economists, the Physiocrats (so called because they believed in natural laws), led by Quesnay, the surgeon of Louis XV., and by Gournay, a merchant. Ques-

nay, a great economic writer, considered liberty and property the cardinal points of natural law. and the cultivators of the soil as essentially the productive class. Gournay, the author of the phrase, "Laissez faire, laissez passer," which became the cry of the French merchants and afterwards the motto of a school, said that manufactures and commerce were also productive: both agreed on a single direct tax on land as the true source of revenue. Turgot accepted their theories, developed them in his great work on "Riches," and applied them practically as minister of Louis XVI. He freed the trade in grain and gave full liberty to manufactures, but fell from power before putting the land-tax into operation, in 1776, in which year the centre of economic thought crossed to England. Later treatises, however, by Condillac, J. B. Say, Bastiat, the most luminous of all economic writers, particularly in distinguishing between "that which is seen and that which is not seen," Chevalier, Leon Say, and others, have kept up the line of French thought. The French Revolution, especially with its unhappy experiences as to paper-money, furnishes one of the most instruct. ive of all object-lessons in Economics.

The greatest of all economic writers is Adam Smith, whose "Wealth of Nations" was published in 1776, the year of the Declaration of Independence. He gathered and co-ordinated all existing materials, reformed, added to, and applied the science. Sir Walter Raleigh and others, in the sixteenth century, Locke, Hobbes, Sir Joshua Child, and others, in the seventeenth, and in the early part of the eighteenth the idealist Berkeley, Francis Hutchison, who preceded Adam Smith in the Glasgow chair of Moral Philosophy, and others, had contributed to English economic literature, but Adam Smith included and superseded their work. He "stands in the centre of economic history;" whatever was written before was the preparation for, and after, the complement of his work, says Roscher. The "Wealth of Nations" recognizes the productiveness of all forms of industry; it expresses the natural or industrial system founded on labor. It discriminates between value in use and value in exchange, emphasizes the division of labor, and advocates liberty as the key to prosperity. After inducing principles from the facts of history, it deductively applies these principles to government and business, assigning to the State limited functions as to education, public works, etc. Next to Adam Smith, Malthus, writing on "Population," and showing its natural increase in geometrical proportion; and Ricardo, the author of a general "Political Economy," but known chiefly by his doctrine of Rent, which shows that rent is not a factor in price, are the great English economists of the last century.

Their chief disciple was John Stuart Mill (the son of James Mill, also an economic writer), whose "Principles of Political Economy" is, next to the "Wealth of Nations," the greatest of economic works. This comprehensive treatise is, indeed, the chief modern authority in Economics. "It accords, in the main, with the doctrines of Smith, Malthus, and Ricardo, but these are amplified, corrected, and enriched by Mill's separate investigations." His work is particularly valuable for its application of principles to practical social questions, as wages and the condition of working-men.

Tooke, who wrote the "History of Prices;" Lord Overstone, the chief advocate of the currency principle adopted in the Bank Act of 1844; McCulloch, author of the "Dictionary of Commerce" and of a bibliography of Economics; Archbishop Whately, who wrote an elementary treatise; and N. W. Senior, who analyzed cost of production and developed the now exploded wage-fund theory, were all important writers of the same generation. The group of men, headed by Richard Cobden and John Bright, disciples of Adam Smith, who, joined by Sir Robert Peel, in 1846 repealed the corn-laws, accomplished one of the greatest practical triumphs that economic study has wrought; from this movement came the "Manchester school" of a priori or "orthodox" economists, who emphasized general principles and carried the doctrine of laissez faire to an extreme which has caused some reaction.

Of later English writers, now writing or who have but recently ceased their work, the more prominent are Herbert Spencer, whose great system of philosophy supports the extreme *laissez faire* doctrine in Economics; Thornton, whose book "On Labor" caused Mill to abandon the wage-fund doctrine; Cairnes, who has newly examined the "Leading Principles of Political Economy" and applied "The Logical Method" with brilliant results; Jevons, who applied mathematical treatment in his "Theory of Political Econo-

my," wrote a useful "Primer" and a valuable study of "Money and the Mechanism of Exchange:" Cliffe-Leslie, a representative of the German historical school, and a determined opponent of the Manchester economists; Thorold Rogers, with his informing "History of Agriculture and Prices," and one of "Work and Wages" in England; Bagehot, editor of The Economist, and a clear writer on banking and other economic topics; Professor Fawcett and his wife, with their "Manual" and "Political Economy for Beginners;" and Mr. and Mrs. Marshall, with their popular presentation of "The Economics of Industry." The vagaries of John Ruskin, the art-writer, do not prevent his "Crown of Wild Olive," "Unto this Last," and other semi-economic writings from becoming sources of inspiration to those who study Economics as a means of bettering the condition of men.

The tendency among later English writers to rebel from the extreme *a priori* school, which emphasizes general principles, has been still more evident in Germany, which is now the most active centre of economic thought. The "orthodox" economists found vigorous coworkers in Rau,

Hermann, Prince-Smith, and others, but the newer "historical" or "national" school, which holds that economic science must be founded on historical experience and the collection of facts, has enrolled such writers as Roscher, author of one of the great modern treatises, Hildebrand, and Knies. List, who wrote a "National System of Political Economy," was notably an advocate of protection, preceding the American Carey. The school of the professorial socialists (socialists of the chair), Wagner, Engel, and others, who advocate State industry, has already been mentioned as the philosophical authority for Bismarck's semi-socialist political policy of protection, State insurance, and the like. Italy has produced also a long line of brilliant economic scholars and writers, but the political position of Italy up to recent years has prevented them from being known, except to special students of the science.

The independence of the United States grew out of "taxation without representation," and economic questions have played a large part in our history. In fact, during the period 1816 to 1844, the lines between political parties were drawn almost entirely upon questions of trade and finance,

and since the restoration of the Union economic issues are again becoming paramount. The protective policy, initiated by Hamilton with an average tariff of 8½ per cent., but opposed by Gallatin, has held sway, despite two revenue-tariff periods. to the present, with its tariff averaging 46 per cent., notwithstanding the freedom of commerce among the States. It has found its ablest modern advocate in H. C. Carey, the most famed of American economists, also notable for his doctrine of increasing production of land, in opposition to Malthus's theory of diminishing returns. American economists have consequently grouped themselves for the most part on one side or the other of this policy. The most notable general treatises are those of Professor Perry, whose interesting volume has met with wide sale; of F. A. Walker, an able writer also on "Money" and "Wages;" and Simon Newcomb, who adopts the mathematical method. These are free-traders. Other special writers on this side are D. A. Wells and W. G. Sumner (in his "History of Protection"). Horace Greeley, R. E. Thompson, and E. H. Roberts (on "Government Revenue") write as protectionists.

A school of younger men, dealing largely with

facts on the German method, includes R. T. Elv (on "Socialism"), F. W. Tausig (on the "History of the Tariff"), and J. L. Laughlin (on the "History of Bi-metallism"). Henry George, giving new color to old doctrines in his "Progress and Poverty," which deals with the land question and urges its taxation to the full extent of rent, is the most widely read economic writer of the present day. The early political controversies on the National Bank, the slavery question culminating in civil war, the greenback issue, and now the silver and tariff questions, suggest how closely the American voter is concerned in Economics, and how necessary it is that every American should carefully study its principles for himself.

XXX.

"THE END OF THE WHOLE MATTER."

THE end of Economics is Wealth. But Wealth is not an end in itself; it is a means towards life. "Humanity," said Kant, "is always to be treated as an end, never as a means merely." To make Wealth the end of life, to reduce man to a mere wealth-creating machine, is a crime against humanity. It is the suicide of society—the same suicide which the miser commits when he paralyzes his body and starves his soul in his delirium for gold. The use of the commonwealth is to produce strong national life-the greatest abundance among men of healthy and happy individual life. "The Sabbath was made for man; and not man for the Sabbath:" this is true also of wealth and of Economics. The economic law is subject to the higher law, and Economics, as an art, is a means of statecraft and is reviewable by Ethics. "Morals," said

a great French thinker, "precedes and dominates political economy as it precedes and dominates politics and law."

The study of the principles of Economics and of economic history reveals great natural laws, persistent in operation, relentless in punishing the transgressions of nations or of men, yet varied in application with the changes of circumstance. For a law is not less a law because its action is modified or limited by other laws. The great force in Economics, the great motive of human activity, is found in the desire to get most with least labor, making the most of the gifts of nature by the process of exchange, to satisfy the ever increasing variety of human wants-applying labor to land to produce wealth, saving that wealth as capital to make labor easier, utilizing brains to the same end, and paying each its share according to the inevitable law of supply and demand. This is the law of the part, of individualism, the centrifugal tendency of each atom to keep on its own way and "look out for itself." But against this law of nature is set over another, the law of the whole, of commonalty, the centripetal attraction which holds each atom to its path in the system of which it is a part. The higher law of humanity, ethical in its nature, and of a scope beyond the individual life, modifies desire, limits the self-force, and creates new conditions of demand. Thus the direction of human endeavor is finally determined less by individual self-interest in itself than by the commonsense of the community, voiced in public opinion, which defines to the individual what his self-interest is. In all ages of the world custom, whose modern name is Mrs. Grundy, has "laid down the law." There would be no misers in a community which did not value gold.

The foundation of society and of each State is its industrial system. The ancient States, based industrially on slavery, regarded in their political economy the few and not the many. They were, as the mathematicians phrase it, in unstable equilibrium: the time of their fall came. Christianity, calling upon each man to be free, and to see in every other man a brother, gave to the State its possibilities of full development. But it required many generations for this seed to come to full fruit. The Dark Ages intervened, with their transitional slavery, holding the serf slave to the soil. Then, with the circumnavigation of the world, the

Copernican theory of the great universe, the discovery of the central law of gravitation, came the rounding out of humanity, the development of a new economic system, and the fulfilment of freedom in free industrial competition, which is the foundation of modern society. Despite the wasting of nations by dynastic wars, and against endeavors from all sides to restrict and thwart it. this principle of development has been holding its own and making its way; we now recognize the protection of individual liberty as the central idea of the State. But we begin to see also that it is not the sole law. With the idea of individual freedom is involved the idea of personal responsibility. The freeman is a part of the State. The individual good must be a part of the general good. Independence involves interdependence. The chain is only as strong as its separate links. Even in the strictest economic sense, each man's prosperity is bound up in the prosperity of all.

The ideal State, towards which modern society is more and more conforming, thus resides neither in the brutal selfishness that leaves "every man to himself, and the devil take the hindmost," nor in the paternal socialism which by restricting individual development would destroy the motive-power of progress. It is a "happy mean" of practical limitations. The modern industrial organization, on which the State rests, is a vast complexity of individuals, worked out through the principle of freedom under existing institutions and laws. This machinery is for the most part automatic, and takes care of itself; interference is disastrous. But like every complex mechanism, it requires precautions against friction, replacements, and readjustments. A product of mind acting in line with nature, it must be ordered by mind acting in line with nature. When the social machinery grinds out injustice, abuses men, makes the rich richer and the poor poorer, the community practically will not accept the extreme laissez faire theory; it will not let ill enough alone, but will apply factory acts to right wrongs. The evils that society has done, society must undo. On the other hand, the common sense also rejects not only the impossible communism which would reduce the industrious and the idle to a common level, but also the socialism which would put the greater portion of the social work under control of the State, instead of leaving it to individuals. Between the two lies the actual work-

ing social system, varying among different peoples and at different times, but persistently in accord with the underlying economic laws, and never for any considerable time, in any stable State, against them. This is controlled always by public opinion, the aggregate of individual intelligences, in its turn directed by education and by the mastery of leadership. And thus the promotion of economic progress resolves itself into the work of political education.

The history of nations shows a continuous movement forward, checked at times by tides of reaction, and crossed here and there by eddies of loss. For progress involves change, and change waste, and waste loss. By such loss we gain. The old machine is only old iron, but the new more than makes up the loss. Yet when it is a human machine, with wife and children also to be fed, which is for the time put aside by new labor-saving machinery or superior skill, no philosophy can mitigate the hardness of life to that man. He is face to face with the relentless facts of that natural but necessary order which destroys one farmer's crops by the storm which saves another's, and accepts no ransom to stay Death from the rich man's

child. Socialism would be but a disastrous remedy; his help is in the providence that compels thrift and saving, in the mutual helpfulness of such benefit associations as the trades-unions, and in an increasing care by employers for the interests of labor. Soon the balance is restored. The men thrown out of work are usually the least skilled; product being increased, those who are left get a part of the benefit in higher wages. In 1804 the weavers of Lyons mobbed Jacquard, because he had invented a labor-saving loom; but soon it gave employment to thousands more; now they see that he has been their greatest benefactor. There were riots against the spinning-jenny, but now every man can have two shirts who before had one or none. Presently the discharged men adapt themselves to new employment, the increase of demand gives them new work, and the increase of product makes them better off. Progress is justified by its results.

The purpose of modern States is "the greatest good of the greatest number;" statesmen therefore concern themselves largely with the condition of "the working-classes," who are the great body of the people. The laborer, however, complains

that in these modern days, with all sorts of laborsaving machinery, he neither is better paid nor can live better nor can take leisure; while the rich are getting richer, the poor are getting poorer. This is partly true and partly not true. Absolutely, the laborer is better off than a generation or a century ago; the facts show that he is better paid, better housed, clothed, and fed, even at the worst, and works fewer hours. But with this advance his desires have increased in even greater proportion: he sees the luxury of the rich, and feels, relatively, worse off than he ought to be. Labor, in fact, has not profited by civilization as it should have done. The reason is found chiefly in false economic systems and bad legislation. While legislation cannot increase product, but can only divert work from one channel to another, it can decrease productivity; it is easier to break down than to build up, as a fire destroys in an hour the work of years.

There are three ways of increasing present prosperity - by discounting the future and leaving other generations to pay our debts; by increasing product, which is accomplished by bettering our industrial organization; or by better distribution, which depends largely on the social control. The

statesman's care must ever be to promote the natural means of the general distribution of wealth by levelling up the body of the people. The possibilities of Life given by Wealth to a nation depend. indeed, not merely upon its amount, but largely upon its distribution among classes. A State in which Crossus with his millions dominates millions of penniless poor has little national life and even less economic force. It is not the cost of Crœsus to the community in what he consumes that makes the difference, for, as Mr. Astor once said, he can himself utilize "only a fair salary for taking care of his own fortune," and his consumption is only his food, his clothes, the value of what he wears out. It is the enormous power of directing industry and the distribution of product in one direction rather than another that gives him his influence on the common welfare. It is only the abuse of riches that is a Juggernaut, crushing labor; capital, well used, is its best helper. "There are busy rich and idle poor," says Ruskin, in showing that neither class is in itself virtuous or vicious. So, too, there are good fortunes and bad fortunes. Of the three great fortunes of this country, the Vanderbilt fortune had its origin in real service. Commodore Vanderbilt's development of the through-line railroad system now brings a barrel of flour from Chicago to the Atlantic at a cost reduced from two dollars to sixty cents, and his returns were but a part of the savings to the community. On the other hand, the Astor fortune, though begun by trading, came chiefly from the rise of land in New York City by "unearned increment:" and the Gould fortune is the result of "speculation," without service to the community. The exorbitant fortunes of recent years have come chiefly from two sources: the unearned increment of land "held for the rise," and gambling in corporate franchises granted by the people; while the poor have been made poorer by a vicious tax system which, in its roundabout and concealed way, took from the poor man much more in proportion than from the rich. It is inevitable, therefore, that legislation in the future must look to the interests of the many rather than the few; and still more, that public opinion, stronger than law, will hold each man to responsibility in proportion to his power.

There is nothing more dangerous, however, in a Government of and by and for the people than a

mistaken notion that any nostrum will prove a cure for all ills, or that we can overcome altogether the relentless discipline of nature. Under the best system of government we cannot rid ourselves of its cost, and the even distribution of all wealth among our whole people would increase the earnings of each but a few cents a day. It is by re-forming our political, industrial, and social system step by step, as opportunity presents itself, not by destructive revolution, that each worker will get the most of life possible for him. Education, honest administration, the prevention of waste, the bettering of the conditions of work, are the great means by which each man willing to work will get work, and with it a wage that will give him opportunity for leisure, and with that the power to use leisure in wholesome and happy life.

It is the glory of our nation that we prepare not for War but for Work. Our two great wars—one of independence, one of emancipation—have both been waged that labor might be free. Without "foreign relations" involving the burden of great standing armies, we have a fair field, in peace, for the unrestricted prosperity of labor. As a wider and wiser education, developed into controlling

force through public opinion, brings our national life more into line with natural law, as we apply in practice the great sanctions alike of Ethics and Economics, that virtue produces wealth and "right-eousness exalteth a nation," our democracy will increase from strength to strength. "In proportion," said Channing, "as Christianity shall spread the spirit of brotherhood, there will and must be a more equal distribution of toil and means of improvement." To that end every American is a Trustee for the Future.



A READING LIST OF BOOKS ON ECONOMICS.

The reader who desires to pursue courses or follow up special topics is referred to the following:

General Works, Primary: Jevon's "Primer," Mrs. Fawcett's "Political Economy for Beginners," Perry's smaller "Introduction to Political Economy."

— *Middle:* Perry's "Elements of Political Economy," Sturtevant's "Economics," Steele's "Outline Study," Ely's "Political Economy," Walker's "Political Economy," Andrews's "Institutes."

— Standard: Smith's "Wealth of Nations," Mill's "Principles of Political Economy" (also in abridged edition by Laughlin), Carey's "Social Science" (also in abridged edition by Kate McLean), F. A. Walker's "Political Economy," Simon Newcomb's "Political Economy."

History, Literature, and Method: Blanqui's "History of Political Economy in Europe," Cossa's "Guide to the Study of Political Economy," Laughlin's "Study of Political Economy." See also Perry's "Elements," and Laughlin's edition of Mill.

Reference Works: McCulloch's "Dictionary of Commerce," Lalor's "Cyclopædia of Political Science and Political Economy," the "Encyclopædia Britannica," and other general cyclopædias.

Statistics: "Statesmen's Year-Book," for all countries; the "Financial Reform Almanac," "Whitaker's Almanac," the Statistical Abstract, and other Government "Blue-books" for Great Britain; the United States Census, Scribner's "Statistical Atlas," based on it, Spofford's "American Almanac," the Government Public Documents, particularly those of the Treasury Department, and the Reports of the Bureaus of Statistics of Massachusetts, New Jersey, and other States, for America.

Money and Banking: Jevon's "Money and the Mechanism of Exchange," Bagehot's "Lombard Street" (the English banking centre), Bolles's "Financial History of the United States," Sumner's "History of American Currency," Laughlin's "History of Bimetallism," Linderman's "Money and Legal-tender," Horton's "Gold and Silver," F. A. Walker's "Money," and his smaller "Money, Trade, and Industry," Wells's "Robinson Crusoe's Money," Green's "Repudiation." As elementary works, McAdam's "Alphabet in Finance," Newcomb's "A B C of Finance."

Taxation and Revenue: Wells's special Reports and Report of New York State Commissioners, Canfield's "Taxation."

Tariff: Young's special Report on "Customs-Tariff Legislation of United States," Taussig's "History of the Present Tariff," Heyl's "United States Impost Duties" (official tariff).

—— For *Free-trade:* Bastiat's "Sophisms of Protection," Wells's "Primer of Tariff Reform," Sumner's

"History of Protection," Taussig's "Protection to Young Industries," Grosvenor's "Does Protection Protect?" Trumbull's "History of the Free-trade Struggle in England," Schoenhof's "Our Industrial Situation," Henry George's "Protection or Freetrade?" Bowker's "Economic Fact-book," and publications of the New York Reform Club, 52 William Street, New York.

— For *Protection*: Stebbins's "American Protectionists' Manual," Mason's "Short Tariff History," Roberts's "Government Revenue," Hoyt's "Protection vs. Free-trade," Thompson's "Lectures," Carey's writings, and publications of the American Protective Tariff League, 23 West 23d Street, N. Y.

Land and Rent: F. A. Walker's "Land and its Rent,"
Henry George's "Progress and Poverty," Cox's
"Free Land and Free Trade."

Labor, Wages, etc.: Thornton "On Labor," Thorold Rogers's "Work and Wages," Brassey's "Work and Wages," Atkinson's "Distribution of Product," Porter's "Bread-winners Abroad," Weeks's "Labor Differences and their Settlement" (arbitration).

Co-operation: Holyoake's "History of Co-operation," Acland and Jones's "Working-men as Co-operators," Barnard's "Co-operation as a Business," Gladden's "Working-men and their Employers."

Communism and Socialism: Ely's "French and German Socialism," Woolsey's "Communism and Socialism," Mill's "Socialism," Sumner's "What Social Classes Owe to Each Other" (contra).



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